THE MARINE RECORD.

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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interest of Lake Carriers, and improve the character of the service rendered to the public.

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A DEEP WATER CANAL CONVENTION.

It has been decided to hold a great convention in Toronto, commencing 17th September next, for the purpose of urging the deepening of the canals to 20 feet at once and to discuss the best means to be adopted to bring about this result. A citizens' committee has been appointed, and the city council have appointed a subcommittee of the council, of which Alderman Thompson is chairman, and made a grant of money towards this object.

The use of one of the city halls has been reserved for this convention. It is proposed to send out ten thousand invitations throughout the West and North West to municipalities, boards of trade, etc., to send delegates.

The matter has been recently discussed in the Canadian House of Commons, where all the Toronto members spoke in favor of the 20-foot channel. The Toronto city council followed this up by a unanimous resolution endorsing the proposals, and whatever action may be taken by the Toronto convention will have an important influence on the Canadian government.

The following is a copy of the resolution passed at a public meeting, held in the city hall, Toronto, on 5th of June, 1894.

Mr. John Brown moved, seconded by Mr. E. E. Shepherd, that steps be taken to have an inter-national convention to meet at Toronto at an early date to consider the question of a deep water way from the Great Lakes to the sea via. the St. Lawrence river, and the best way of providing ways and means for the construction of the necessary canals and improvements in the rivers consequent upon the adoption of the 20-foot channel from the lakes to the ocean.

The following gentlemen were appointed by a committee to attend to this matter: Messrs. P. G. Close, David Blain, Hugh Blain, Barlow Cumberland, E. E. Shepherd, John Brown, R. C. Steele, W. J. Mackenzie, Wm. Parsons, J. H. Boyle, W. Leake, W. E. Redway, Ald. Graham, Ald. Frankland, Geo. Chapman, R. Kilgour, W. Bell, Peter McIntyre, Ald. Thompson, Geo. Faulkner, E. F. Clarke, Peter McIntyre, secretary, the above committee to have power to add to their numbers.

NEW TONNAGE.

The only new lake built steamer to which an official number was granted by the Bureau of Navigation, Washington, D. C., for the week ended July 14, 1894, was the West Bay City built steamer Madagascar, of 1203 gross tons, hailing from Port Huron, Mich.

PREMIUMS FOR NAVAL VESSELS.

Up to date seventeen vessels in "Uncle Sam's" new navy have earned premiums amounting altogether to $2,264,586, of which about $1,000,000 has gone to the Cramps, says the Boston Herald. Ten contract vessels remain to be tried, but the conditions of their contracts only give two of them a chance to carry off the laurels of the Minneapolis as a premium winner. One of the ten is the torpedo boat Ericsson, which will probably take the place of the Minneapolis as the fastest craft in the navy, since her contract calls for twenty-four knots in a two-hours' run; but she only gets $2,500 per quarter knot of excess up to twenty-five knots, and $3,500 per quarter beyond that point.

A NEW VIGILANT.

Mr. Herreshoff has received a commission from George Gould to build another yacht for him which will in every way be lighter than the Vigilant, now racing in British waters. She will be constructed entirely of bronze instead of being of steel up from the water line, as the Vigilant is, while her mast and rigging will be made as light as possible, her boom and gaff will be of aluminum and she will be provided with a special suit of sails of exceptional lightness. The Vigilant has been racing much heavier than she was in the American cup races in New York Bay. Part of the steel which was inserted to strengthen her for the trip across the ocean, and weighing several tons, has not been removed, and, as it cannot be entirely regulated by ballast, the Vigilant is placed at a disadvantage.

THE CLEVELAND YACHT COMANCHE.

Advices from Boston, Mass., state that the handsome inland steam yacht Comanche, owned by H. M. Hanna, of Cleveland, arrived all well at that port after a northern cruise. The yacht is under the command of Capt. Benjamin Hawes, of Chelsea, Mass., who for years has had charge of the largest of ocean tugs and coastwise steamers on the coast. Capt. Hawes reports that he sailed from Cleveland June 1st, passing through the Great Lakes to the River St. Lawrence, then skirting the coast as far north as Labrador, stopping at Montreal and many of the interesting ports, where they indulged in salmon catching. During the extreme warm weather the yacht cruised in northern latitudes; then her owner decided to take a run to the States, calling first at Campbelltown, Halifax, and some other ports in the provinces. It is as yet undecided whether the yacht will return home to the lakes this year or not. She is to be placed in dry dock at Boston, and, after an overhauling, will sail, stopping at Newport and Narragansett, then going to New York. Her owner may make a voyage to Europe in her this fall, or to the West Indies.

TO ARBITRATE TRANSPORTATION TROUBLES.

Mr. Springer has introduced in the House a bill to create a National Board of Arbitration to settle controversies between employees and employers. The bill is drawn on the lines of President Cleveland's message of April, 1886.

It establishes in the Department of Justice a National Board of Arbitration, to consist of three members, which shall be charged, among other duties, with the consideration and settlement by means of arbitration whenever possible, of all controversies between employes and employers. The members of the Board are to hold office for six years and receive $5,000 per annum; and the President may, in his discretion, designate the Commissioner of Labor for the time being to perform the duties of one of the members of the Board; and in that case only two shall be appointed.

Whenever differences or controversies arise between railroad corporations or other transportation companies engaged in the transportation of property or passengers among the States, or with foreign nations, and the employes of said companies, and whenever differences or controversies arise between corporations or companies engaged in the manufacture or mining of articles or products used in and essential to the carrying by such corporations or companies of such commerce, and their employes, which differences or controversies may hinder such tronsportation of property or passengers, or such inter-state or foreign commerce, or which may hinder the transportation of the mails of the United States, and whenever any differences or controversies within said territories or within the District of Columbia between employes and their employers, all such difficulties or controversies may be settled by the National Board of Arbitration created by this act.

Whenever either party to any difference or controversy may desire to submit the same to arbitration, it shall present to the Nationol Board a petition setting forth the facts, and praying for the relief it desires. It shall submit a copy of it to the other side, with notice to appear and answer it. In case the party declines to file an answer or refuse to appear in the case, the Board is to make an investigation and render a decision the same as if an answer had been filed. The board is to report the result of its investigations to the president, who shall transmit the same to Congress.

A sufficient sum of money to pay all its expenses under this act, and to carry it into effect, is asked to be appropriated for the fiscal year ending June 30, 1895.

A NEW TRANSPORTATION LINE.

The first cargo of coal ever consigned to Quebec by way of the St. Lawrence, was shipped on the barge Augusta, last week, from Oswego, N. Y. It is believed that this opens the way for a great enterprise, and that the coal trade of the province of Quebec will be diverted to the lakes. Hitherto coal for that part of the country has been shipped in vessels from Nova Scotia.

A MASTER CENSURED.

Capt. Theodore Mott, of the steamer Romeo, of Chicago, has been censured by the local steamboat inspectors for running down the sloop yacht Phantom last week off Lincoln Park. Capt. Mott admitted the blame of the collision, and stated that he was too sick at the time to stand up, and had sat down on a seat for a minute, during which time the collision occurred. As Capt. Mott had a good record for careful navigation, the inspectors let him off with a reprimand, which was satisfactory to Capt. E. P. Warner, of the Phantom, as the captain of the Romeo agreed to repair all damages to the yacht.

NEWS AROUND THE LAKES.

CHICAGO, ILL.

Special Correspondence to The Marine Record.

Patrick Finn chartered the steamer Monteagle for 52,000 bushels of wheat to Buffalo at ⅞ of a cent.

J. J. Rardon & Co. chartered the steamer Mecosta for 90,000 bushels of corn to Port Huron at ⅞ of a cent.

Palmer, Cook & Calbick chartered the steamer W. H. Wolf for 83,000 bushels of wheat to Buffalo at ⅞ of a cent.

Capt. John Prindiville chartered the steamer D. M. Wilson and consort Manitowoc for corn to Port Huron at 1 cent.

J. G. Keith & Co. chartered the schooner Sam. Flint for corn to Port Huron at 1 cent, the steamer John Duncan for corn to Buffalo at ⅞ of a cent.

The schooner R. Halleran was unloaded this week by William Nellon's gang of eight coal heavers, of 1600 tons of coal, from two hatches, in sixteen hours.

The steamer John Duncan, Capt. G. W. Flood, arrived Saturday night from Buffalo with 2,100 tons of coal, the largest dead weight cargo the Duncan has ever carried.

President George Uhler of the National Marine Engineer's Association will be here Saturday from Philadelphia, on his way to pay his annual visit to the Pacific Coast Associations.

Capt. George Manson who, a number of years ago, sailed on the great lakes, and is now captain and owner of the passenger steamer Admiral, on Lake Geneva, was in Chicago Tuesday visiting some of his old friends.

George Warrington intends to start on his steam yacht Buena, Saturday, with his family and three guests for a cruise on Lake Michigan, extending as far as Mackinaw Island. He expects to be gone about three weeks.

Elphicke & Co. chartered the steamer Alva for 120,000 bushels of corn to Buffalo at ⅞ of a cent; the steamer Josephine for 40,000 bushels of wheat and her consort the Thos. L. Parker for 45,000 bushels of wheat to Kingston at 2¼ cents.

The W. S. Bogle Co. shipped four car loads of machinery Saturday to the Yougheiogheny & Lehigh Coal Company for their new coal dock at Lake Superior. They will ship in a few days the machinery for the Lehigh Valley coal docks at West Superior.

Thos. F. Dowd, National Secretary of the M. E. B. A., informed your correspondent that the numerical strength of the organization shows up better than in any former year. This with their excellent financial condition augurs well for the M. E. B. A.

The steamer Selwyn Eddy arrived Tuesday morning and went to Peabody & Co.'s dock with 4,252 tons of coal, the largest cargo of coal ever brought into Chicago river. The next largest cargo of 3,972 tons of coal was unloaded at the same dock from the steamer Alva, last week.

At Miller Brothers' shipyard, the tug Protection was in dock for repairs to shaft; the sloop yacht Valliant for repairs to centre board; the schooner yacht Crusader for scraping and painting bottom; the tug L. B. Johnson to have a leak stopped; the schooner Marengo was at the derrick and received a new fore mast.

The steamer Majestic was chartered Tuesday for 80,000 bushels of wheat from Toledo to Chicago at 1¾ cents. The shipment was made by Carrington, Hannah & Co. and it was said that another steamer would be chartered for an equal amount. This grain on its way up the lakes will meet exactly the same grade of wheat going the other way and carried at ⅞ of a cent from Chicago to Buffalo. The shipment is due to the fact that Chicago wheat markets are ranging from 2 to 3 cents per bushel above those of Toledo and Detroit and there is a fair profit in shipping grain this way just now.

Friday morning, Capt. Julius Baker of the schooner York State at this port heard an outcry from the men who were unloading the cargo. He rushed on deck just in time to see a little boy sinking for the second time close to the schooner. He at once plunged into the river and not succeeding in reaching the little fellow he made a second dive and fortunately brought him to the surface and swam back to the dock, where both were assisted out by helping hands. The little boy, aged about nine years, easily recovered from the ducking and fright he had received and ran home. The worthy captain soon changed his clothes, but retained the taste of the smurky river many hours afterwards, however he was well pleased that he had been the means of rescuing the little drowning boy.

The Independent Tug Line have purchased the wreck of the steamer Lucille, which sank at the Lake View Works Crib in February, 1893. The Lucille was built by Miller Brothers in 1884 for the Shufeldt Distillery Co. and was used to carry out and dump the refuse of the distillery into Lake Michigan. At the time of her sinking, she had been chartered by a firm, who were completing the crib, and the cause of her sinking was by contact with heavy ice when delivering supplies to the workmen. Her dimensions are 100 feet keel, 22 ft. 8 in. beam, 10 ft. 1 in. hold, gross tonnage 159 tons. She has 2 engines, 16 by 22 each; boiler 8 by 14. She was an excellent ice crusher and kept Chicago river open several winters. The Independent Tug Line intend to raise her and convert her into a wrecking tug.

CLEVELAND, O.

Special Correspondence to The Marine Record.

Capt. George P. McKay, treasurer of the Lake Carriers Association spent Wednesday and Thursday in Detroit on business connected with the Association's interests.

Capt. Wm. S. Mack has been obliged to give up his command for a trip owing to the serious illness of his wife at this port. Capt. Schuette has been given charge of the V. H. Ketcham until Capt. Mack is able to rejoin her.

Mr. Russel, representing the Crosby Co. of Boston, Mass., is in the city hustling for the interests of the company and taking orders for pop safety valves, steam gages, indicators, and other engine and boiler fittters supplies.

The members of the Cleveland Railroad and Steamboat Club were handsomely entertained by the Detroit & Cleveland Steam Navigation Co. on Monday, on the steamer City of the Straits. Besides a trip to the Bay, the members were handsomely banqueted.

The Cleveland Ship Building Co. are building for the Shenango Steel Co., of Newcastle, Pa., one of their well known blowing engines. The diameter of the steam cylinder is 40 inches, blowing cylinder 84 inches with a stroke of 54 inches. The engine is one of the latest improved adjustable Corliss cut-off.

The Cleveland Dry Dock Co. are kept fairly busy at work. During the week the Massasoit was dry docked to be searched up, the Grecian for bottom repairs, the D. F. Rose for a new wheel and the schooner Helvetia for repairs to forefoot, calking and having her keel box stopped up so that in future there will be no use for her center board.

Engineer Hay, of the steamer Castalia, is making schedule time with his engines in the Two Harbor trade. The round trip to this port is counted on to the hour in fine weather. The Globe are the builders of both hull and machinery, and such excellent work as the boat is now doing must be gratifying to them, as well as to her owner, Mr. Harvey H. Brown.

The large steel steamer building at the yards of the Cleveland Ship Building Co., will not be launched on Wednesday, August 1st, as given in the daily papers. Mr. James C. Wallace, manager of the company, states that no date has yet been set for the launch, and he can't conceive how such an unauthorized report should have been printed. However, about two weeks hence will be ample time to give notice of the date set for the big immersion.

The Cleveland Tug Co. are certainly getting rather better than an even share of towing to do at this port, one tug alone having a record of over a hundred tows last month. Manager George Elsey seems to have secured an excellent staff of masters and engineers for the line, and, with the addition of the three new steel tugs turned out this season, the Cleveland Tug Co. are at every point equipped for instant and competent service in handling all classes of tonnage. The offices at Main Street bridge are to be replaced next season by a fine three-story block, when more commodious office room will be taken by the new tug company.

The schooner Grampian, recently launched from the yards of James Davidson, arrived here in tow of the Monahansett Tuesday afternoon with the Northwest contingent of Coxey's army. With a clean swept hold the crowd of about 500 men found ample sleeping quarters through from Bay City via. Detroit to this port. A number of the recruits are from the state of Washington and embarked on their lake trip at Duluth, Minn., bound for Washington, D. C., to join the Coxey enthusiasts. The arrivals were allowed to land and quietly ignored at this port so that their stay is not likely to be productive of either good or harm.

The elegant and exclusive passenger steamer North-West touched at this port on schedule time Wednesday morning with quite a large passenger list. Among those who embarked here were Mr. Luther Allen, president of the Chamber of Commerce and a member of the firm of the Globe Iron Works Co., builders of the North West. Mr. Allen was accompanied by his family. Capt. E. M. Peck, than whom no one is better known in marine circles in Detroit, also felt disposed to be whirled over the ground at a twenty-five mile an hour clip in a steamer, and got aboard the big white boat. Assistant General Manager, Mr. Fred Gordon, after watching closely the actual work being done by the boat, is now satisfied that running time can be made punctually and has staid ashore this trip to attend to the completion of the sister ship, the North Land.

Among the classification societies now doing business on the lakes I find that Capt. Herriman, manager of this department for the Bureau Veritas, is securing a fair representation. The large steel freight steamer now under construction and nearly completed at the yards of the Cleveland Ship Building Co., has been built directly under his supervision and for a class in the highest rating given by the Bureau Veritas. The Wilson Line steamer Yuma and the Bradley liner, Alva, were also classed in this well known register of shipping. Capt. Herriman will visit this port in a few days to finally inspect the I. W. Nichols previous to her launch.

At the yards of the Globe Iron Works Co. No. 53, the large steel freight steamer now under construction for builders' account is being steadily worked on, and if the builders desired, she could be put afloat in a few weeks, though it is quite likely that if freights do not mightily improve it may take as many months to complete her. The triple expansion engines, 24, 38 by 61, with 42 inches stroke, are all ready to go in her; so also are her Scotch type boilers. By the way, No. 53 is the only designation this future money earner is known by at the present time. Prominent vessel owners, builders and others have given their names to A1 tonnage, and, as a suggestion, that I think should be adopted, No. 53 ought to mean the John F. Pankhurst.

It appears that the fine on the steamer Norman for carrying her life boats lashed to the deck amidships, nstead of hanging to davits or at some other place convenient for instant launching in case of accident, as is required by the laws for steamers carrying a passenger license, was assessed on information filed by an officer of one of the revenue cutters, who will receive half the fine. While it has been said that a large number of the steamers on the lakes have neglected this rule, it is found, upon investigation, that the number is very small, as it applies only to boats with passenger licenses. While many of these carry some of their boats on deck, nearly all have enough boats so placed, in compliance with the law, as to accommodate more than twice the number of passengers ordinarily carried by them.

DETROIT, MICH.

Special Correspondence to The Marine Record.

The Frontier Iron Works are making a spare wheel for the whaleback Pathfinder, and one for the steamer John Mitchell.

The forest fires around Lake Superior are making navigation a very arduous task on that lake, the smoke from the land lies close to the surface of the lake in dense clouds, thicker than heavy fog. Captains report that the run between Duluth and Whitefish Point is attended with great danger and difficulty, and that at some points the smoke is intolerable, but they have to get through it some way.

In the matter of the Northern Steamship Co. vs. Capt. R. J. Hackett, in which the sum of $8,058 was awarded Capt. Hackett for removing the wreck of the schooner Fayette Brown, Justice McMahon, of Toronto, has decided that the sum of $3,515 must be deducted from the award. The Fayette Brown was sunk in Canadian waters June 4, 1891, by one of the Northern Steamship Co.'s steamers. Capt. Hackett has appealed against the decision.

A young man of Galesburg, Ill., L. O. Boostrom, has invented a new propeller wheel, and is giving it some practical tests here. It is a novelty, having a set of blades placed at the extreme ends of arms radiating from the center, thus placing all the pushing force where it will be the most effective. It was tried on the yacht Ida M., increasing her speed from one and one-half to two miles per hour. Mr. Boostrom figures that in the screw wheel a considerable part of the blades pushes the water around, without doing anything to speak of in the way of propelling the boat, while his wheel makes its whole force effective.

Gen. O. M. Poe, is quoted as saying; "There will be no formal opening of the Hay Lake channel. It is open now for boats that wish to use it. Part of our work has been the placing of targets to mark the axis of the river; there are two at each point, diamond-shaped boards set on top of posts, the nearest one being white with a black stripe vertically through the center, while the rear board is white. With the aid of these boards boats can navigate the channel in the day time, but for night travel there is no provision. The lighting of the channel is in the province of the light-house department. Maj. Adams, light-house engineer, and Commander Mead, inspector, were up looking over the ground last week, but I have not learned when the lights will be placed. The channel is practically finished. There are still a few bowlders in the main channel of the river above the Sugar island rapids, but weare sweeping for them, and raising them with derricks, and in four or five weeks there will not be one left.

BUFFALO, N. Y.

The steamer Corona is having her bottom calked.

Among the visitors in town this week were Capt. Thomas Fitzpatrick, vessel owner of Cleveland, and Capt. James Davidson, the West Bay City shipbuilder.

Capt. James Davidson states that the last of a number of new vessels under construction in his shipyard will be launched next Saturday, at West Bay City. General repair work up there is being done to a large extent. Among the vessels being reconstructed is the Lizzie Law, which was sunk in collision with the David Vance last year, on Lake Erie, and which was raised later on. The Law will be ready to sail in about ten days. She has received a thorough overhauling and will make a good appearance when she comes out again.

CANALS CONNECTING THE GREAT LAKES, INTERSTATE AND COAST.

The following table shows number and dimensions of locks, etc., of canals connecting with the Great Lakes.

This table is a supplement to information published on the Pilot Chart of the Great Lakes and has been obtained from official correspondence with superintendents and officers connected with the canals:

No.	NAME OF CANAL.	TERMINAL POINTS.	LOCKS. No.	LOCKS. L'gth.	LOCKS. Wid'h	LOCKS. Dep'h	LOCKS. Lockage.	Total length of Canal.	Height of Bridges	CANAL TOLL.
				Feet.	Feet.	Feet.	Feet.	Stat. Miles.	Feet.	
1	Ohio	Cleveland—Portsmouth	152	....	40	4	.....	309	.....	.....
2	Miami and Erie	Toledo—Cincinnati	105	....	40	4	.....	250	.....	.....
3	Erie	Buffalo—Albany	110	110	18	7	655	352.18	10.5	Free .....
4	Oswego	Oswego—Syracuse	29	110	18	7	155	38	.....	.....
5	Illinois and Michigan*	Chicago—Mississippi River	....	97.5	17.5	5	.....	.....	12	.....
6	Sturgeon Bay	Lake Michigan—Green Bay	....	....	....	....	.....	1.25	.....	.....
7	Sault Ste. Marie	Lake Huron—Lake Superior	1	515	80	16	18	1	.....	.....
8	Lachine	Montreal—Lachine	5	270	45	14	45	8.25	.....	2¼c. per registered ton.
9	Beauharnois	Melocheville—Valleyfield	9	200	45	9	82.5	11.25	.....	..... do.....
10	Cornwall	Cornwall—Dickinson's Landing	6	200	55	9	48	11.5	.....	..... do.....
11	Williamsburg (Farran's Point Rapide Plat, and Galops Canals.)	Farran's Point—Gallops Rapids	6	200	45	9	31	12.38	.....	..... do.....
12	Welland	Port Dalhouse—Port Calborne	26	270	45	14	336.75	26.75	.....	..... do.....
13	St. Ours Lock	St. Ours	1	200	45	7	5	.125	.....	..... do.....
14	Chambly	Chambly Basin—St. Johns	9	118	22.5	7	74	12	.....	..... do.....
15	St. Anne's Lock	.....	1	200	45	9	3	0.125	.....	..... do.....
16	Carillon	.....	2	200	45	9	16	0.75	.....	..... do.....
17	Grenville	.....	5	200	45	9	43.75	5.75	.....	..... do.....
18	Rideau	Ottawa City—Kingston	Ascen'g 35 Decen'g 14	134	32	5.6	282.25 r. 164. fall	126.25	.....	..... do.....

* To La Salle, Ill., locks will pass vessels of 75 feet beam, 320 feet length and 6 feet draft.

A WHALING ADVENTURE.

A most disastrous accident occurred to the whale-ship Essex, belonging to Nantucket, and commanded by Captain Ronald Pollard. While cruising in the South Pacific the ship discovered a school of large sperm whales, and all the boats were at once lowered to assail them. The mate and captain succeeded in fastening at about the same time. The former lanced his victim, and while engaged in tying his fins together preparatory to securing him alongside the ship, which was about a mile away, but bearing down in response to the mate's signal, the captain was placed in danger by the whale which he had struck making for his boat after rising. Great dexterity on the part of the rowers and steerer swept the boat out of the path of the infuriated fish—which kept on in a direct line, dragging the whale-boat after him with such velocity that the parted waters stood a foot above the gunwale, but were prevented from falling into the boat owing to the great speed maintained. It was quickly seen that the ship was in the path of the fleeing whale, and the captain halloed to the men on board to alter the course of the vessel, and it was evident that the danger was appreciated by the helmsman of the Essex, for the head of the ship was observed to fall off; but ere she could be swept out of the track the whale struck her with such frightful force that the bows were crushed in, and all three masts were carried away. The vessel immediately filled with water but remained floating, with her upper deck even with the water, owing to the number of empty barrels in her 'tween decks.

Fortunately quite a quantity of provisions were in the galley when the accident took place, and a barrel of salt pork and one of beef were recovered from the hold a day or two later. For over a week the crew lived on the deck of the ship, hoping to sight a sail; but none appearing, and realizing that they were in an unfrequented part of the Pacific, they took to the boats, with the idea of reaching Valparaiso, the nearest port. A few days following they sighted Ducie's Island, an almost barren land situated in the latitude of 24° 40′ south, and the longitude of 124° 48′ west. In a cave close to the beach the men found eight skeletons, and a board in which had been cut with a sailor's knife the words, "Ship Elizabeth of London." Three of the crew, however, preferred remaining on this sterile island rather than venture three thousand miles in an open boat; so leaving them a small stock of provisions and some fishing lines, the remainder of the men headed to the eastward.

For several days the boats kept together; then they became separated, never to meet again. Six weeks later a battered whale-boat drifted into the harbor of Valparaiso just as the sun was sinking across the wide reach of crimson-tinted waters. The glory of the sunset bathed the stained and tattered sail until it looked to be woven in threads of gold. Even the gaunt faces of the crew, caressed by tender touches of the mystic glow, became fair to look upon; and their ragged vestments seemed to wrap them about with the raiment of a king.

Upon learning the story of the shipwreck, an American man-of-war, then at anchor in the harbor, was depatched to Ducie's Island, where the three men were rescued.—*From Harper's Young People.*

ITEMS FROM THE LOG BOOK.

The schooner Jennie White is loading coal at Hamilton, Ont., which she will take to New Foundland, there a cargo will be shipped for Wilmington, N. C., and she will enter the coast trade.

Shipments from Ashland, Wis., for the week ending July 24 were 11,350 tons, and of lumber 7,300,000 feet. Total ore shipments for the season were 718,849 tons. Lumber shipments for last week from Washburn were 4,810,000 feet.

The American tug Morning Star, owned by R. L. Lucas, of Church Landing, Sault Ste. Marie, helped a Canadian tug one day last week to save a raft of logs from going on the beach. For this infraction of Canadian law she was seized by the Canadian authorities. While she was tied up to the government dock, the watchman on the boat was hired to row a man across the river. During his absence, three men made a rowboat fast to the tug and towed her over to the American shore. Mr. Lucas says he thought the laws of Canada would permit him to assist a vessel in distress.

The steamer Henry J. Johnson, which grounded on Point Pelee, Saturday had a sad mishap in connection with her grounding. She was towing the schooner Helvetia, and the latter with the way she had when the steamer stopped, ran past the latter with such force that her tow line pulled out some of the steamer's stanchions and part of her after cabin. When the captain went aft he found the mate lying lifeless on the deck, between the cabin and the bulwars. It is supposed that the tow line or some of the wood work struck him.

The fish tug Louise of Sandusky was seized on Tuesday by the Dominion fishery cutter Petrel. She is charged with having taken fish in Canadian waters from the 12th to the 16th inst., that her captain steadily ignored the Canadian customs regulations, and that the officers have been unable heretofore to board the boat when she had a cargo of fish. The fish on the Louise when she was captured was put on board the tug Dresden and the Louise is tied up at the dock at Amherstburg, awaiting further instructions from the Dominion authorities.

The recent seizures of American tugs fishing and working in Canadian waters by the Dominion Government has called attention to the Canadian tug Kittie Haight, which is at the present time attending an American dredge at work on the twenty-foot channel, at the foot of Lake Huron, wholly in American waters. It is charged that the Haight tows vessels from one American port to another, and also does general harbor work in American waters at Port Huron. Complaints have been made from time to time to the United States customs authorities that the Haight is violating custom regulations in this work, but no attention has so far been paid to them. The recent decision of Collector Russell, of Chicago, in fining the Canadian steamer Erin for towing vessels between American ports has caused these complaints to be renewed.

At Racine Friday Capt. John Crangle shot his wife twice, once in the back of the head and once in the right shoulder, and then turned the still smoking revolver to his right temple and pressed the trigger, death resulting instantly. His wife may recover. Capt. Crangle was one of the best known navigators on the lakes.

SOME RECENT TREASURY DECISIONS ON MARINE AFFAIRS.

DRAWBACK ON BITUMINOUS COAL USED AS FUEL ON BOARD AMERICAN VESSELS—QUESTION BEFORE THE SUPREME COURT.

TREASURY DEPARTMENT, May 23, 1894.

Sir: The Department is in receipt by reference from the Attorney-General, of your letter of the 12th instant, in which you inquire whether, under the law now in force, a drawback is allowed on imported bituminous coal used as fuel on board of American vessels propelled by steam, and engaged in the foreign trade.

You refer to the provision in the tariff act of 1883, authorizing an allowance of drawback on imported bituminous coal used for fuel on board of "vessels propelled by steam which are engaged in the coasting trade of the United States, or in the trade with foreign countries." You further refer to the fact that said provision was originally held to be applicable to either American or foreign vessels, but was subsequently restricted to vessels of the United States (by section 10 of the act of June 19, 1886, cited in synopsis 7594), and you express a doubt as to the correctness of the information given you by the customs officers at Savannah to the effect that the law has been again changed by the act of October 1, 1890.

In reply, the Department has to inform you that the omission from the act of 1890 of the provision found in the tariff of 1883, for drawback on bituminous coal, is held by the Attorney-General and this department to be equivalent to a repeal, notwithstanding the mention of said provision in the act of 1886.

Although this ruling was reversed by the District Court for the Northern District of California and the Circuit Court of Appeals for the Ninth Circuit, in the case of Allen vs. The United States, it was not acquiesced in by the Attorney-General, who informed this Department, on the 26th ultimo, that a writ of certiorari has been applied for by him and has been granted by the Supreme Court of the United States.

Pending the decision of the question by the Supreme Court, the Department's ruling remains in force, and no drawback is therefore allowed on bituminous coal used as fuel on board any vessels.

To MR. DENIS J. MURPHY, Savannah, Ga.

ADMEASUREMENT OF VESSELS.

TREASURY DEPARTMENT
BUREAU OF NAVIGATION,
WASHINGTON, D. C., May 4, 1894.

Sir: This office is in receipt of your letter, dated the 12th ultimo, reporting upon a statement made by the Supervising Inspector of Steam Vessels that certain steamers have not been properly admeasured. He states that many instances of complaint and trouble have grown out of the different modes of admeasurement, "in fixing the number of boats, as well as other life-saving appliances, when tonnage in any way governs." You report that your rule of admeasurement is that provided by the "general regulations under the customs and navigation laws of the United States."

On the 7th of July last the surveyor of customs at Memphis, Tenn., was instructed by this Bureau as follows:

This office has considered the question presented by you regarding the admeasurement of certain steam vessels plying on Western rivers.

The steamers have a freight space between the tonnage deck and a deck above supported by stanchions, the sides of the inclosed space being open, but capable of being closed, when desired, by canvas or tarpauline so as to protect the freight from the action of the weather. In this space most of the cargo is carried. The boats are well built with flat and shallow hulls, inside of which freight is not and cannot be transported to any material extent. A diagram forwarded by you shows that the boiler is in the forward part of the vessel and the engine room in the part aft, both being in the space mentioned, which is devoted to the same use, whether open on the sides, as on lower river boats carrying cotton, or "closed in," as on the upper river, for the better protection of miscellaneous or perishable freight. If this space be not admeasured, wide, shallow boats, constructed as mentioned above, and having perhaps four times the carrying capacity and displacing surface of those constructed for and used on the Missouri river, would have a recorded tonnage scarcely any greater than the latter. Were the sides boarded up, as in the case of the steamers last mentioned, there would be no question, and the space would be admeasured as a matter of course.

The exclusion of the space from the reported tonnage of these steamers would be unfair to the owners of other vessels; its inclusion is necessary in order to obtain a true idea of the vessel's carrying capacity, and its admeasurement seems to be prescribed by law. (Section 4153, Revised Statutes.)

Article 81, Regulations of 1892, requires that the marine documents shall express the tonnage under the tonnage deck, and that of the between decks above the tonnage deck.

Reports have been obtained from the various ports on the Western rivers, and it is found to be the practice generally to admeasure such between decks as a whole, and then to make the various deductions authorized by law and regulations, for the purpose of ascertaining the net tonnage.

The adoption of the practice at your port is hereby approved.

Your attention is invited also to the decision of March 26, 1894 (Synopsis 14792) in an analogous case, that such spaces should be admeasured.

The practice in all districts should conform to these rules, and you will please take action accordingly.

Respectfully yours,
EUGENE T. CHAMBERLIN, Commissioner.

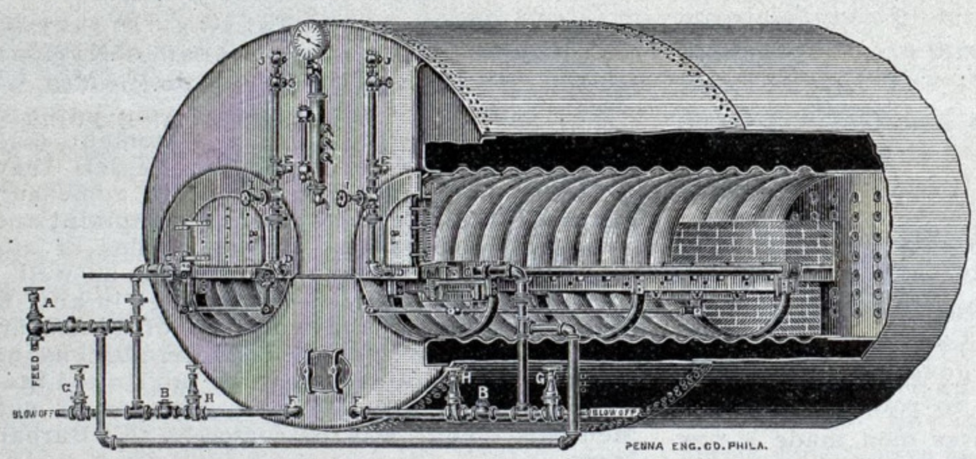
To Surveyor of Customs, Evansville, Ind.

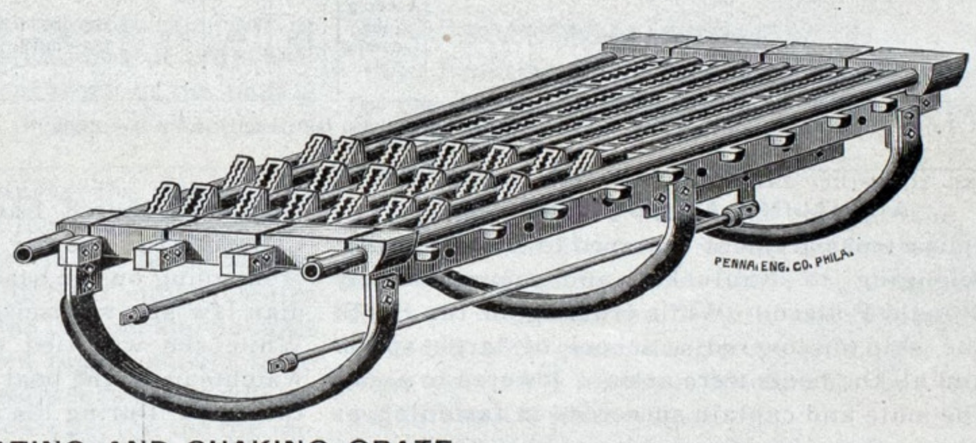
THE REAGAN MARINE WATER CIRCULATING AND SHAKING GRATE.

(ILLUSTRATED.)

The accompanying cuts represent the marine grate manufactured by Water Circulating Grate Co., 1028 Filbert street, Philadelphia, and show grate before it is put in and after it is connected. With this grate a marine boiler can be kept at the same temperature both at the bottom and top and is equalized throughout. One hundred pounds of pressure or more can be obtained in from fifty to sixty minutes, as the circulation carries the water from the bottom of the boiler and returns it at the top, whether feeding or not. The circulation will break and rot out the scale, no matter how hard it may be. This grate should outlast a boiler, because the shaking device, being underneath the water bars, cannot be readily burned out or warped, as it is protected by the water in the bars and is unique in this respect. The fires can be kept low and bright at all times, and owing to this the combustion is quite perfect, and fires can be kept at a white heat.

With bituminous coal, fires need not be cleaned for weeks, except by shaking, as all parts of the fire can be cleaned with the least motion of shakers. The shaking device is in two parts, one half being in front and the other half at the back, and each can be operated independently of the other. All the water is fed through the grate into the boiler, and by this means, when the water enters it, it is at the same temperature as the water already in the boiler, thereby keeping the boilers equalized at all times. The connections are made so that the grates and boilers are blown simultaneously, keeping both grate and boiler free from sediment and scale. It is said that with this grate the work of three boilers can be done with only two, and save coal besides. The average increase of power which they give is claimed to be about 33 per cent. This grate makes steam very fast and holds it steady. The gain in temperature when feeding is from 110 to 130 degrees Fah., and the higher the pressure, the better the results. Marine boilers equipped with this grate will always have an equal expansion, which is a great point and worthy of consideration, especially with marine boilers.





THE REAGAN MARINE WATER CIRCULATING AND SHAKING GRATE.

Users of this grate claim a saving of 20 to 30 per cent. in fuel and a large gain in power; inferior coal and coke, screenings, sawdust and shavings, show big results. In cases where coke and bituminous coal are used, there is no necessity of ever cleaning the fires at all. All parts of this grate are interchangeable, and can be taken from or put together without removing the grate or blowing the boiler down. When the grate is adapted to marine boilers, all the work on the grate is done before it is put into the furnace, and when finished is pushed in whole and in one solid piece; it is then dropped into its position. All grates are made to conform in size to the furnaces, and no alterations are necessary, all the feeds and blowoffs being left just as found; in other words, nothing need be altered or deranged. A pump or injector can be used, and hot or cold water can be fed as desired.

A large number of these grates have been in use for some time, and show little sign of deterioration. Moreover, this invention is no longer in its experimental stage, but, on the contrary, has long since been proved to the satisfaction of users to be reliable as a fuel-economizing and labor-saving device.

U. S. SHIPPING COMMISSIONERS.

The New York *Maritime Register* is evidently not in favor of abolishing the offices of shipping commissioners, according to the following views published in its latest issue:

"Why the House Committee on Merchant Marine should have reported favorably to the House the Maguire bill which removes from United States Shipping Commissioners their jurisdiction over coastwise vessels, is beyond the ken of most ship managers. The desire for its repeal came from San Francisco, where seamen are trying to evolve a system of service that gives them everything without enforcing any obligations upon them. Naturally in a bill emanating from such a source, no provision is made for control of coastwise seamen contracts, beyond the remedy by process of civil courts. This rather slow process would avail nothing against a seaman who chose to desert after receiving his advance. It is a most easy thing to work up a maudlin sympathy for the sailor, and no place offers a better opportunity for this than Congress. There are so few men in that body with any knowledge of maritime affairs that it is easy to muddle them upon shipping legislation and requirements. While this condition lasts such bills as those of the Maguire kind must be expected. If it is impossible to get shipping men in Congress, it would not be a bad idea to induce some Congressmen—not lawyers—to make a study of shipping interests. A common sense advocacy of them offers a big chance of honor and glory for some ambitious statesmen."

MARITIME LAW.

THE C. P. MINCH.

District Court, N. D. New York, May 17, 1894.

SALVAGE—WHAT ARE SALVAGE SERVICES. A vessel anchored near shore on a dark, squally night, in a heavy sea, swung round towards the shore, and her bow began pounding on a sand bar. The master went ashore with part of the crew, found a tug, and sent her out next morning. After he left, the mate and remaining seamen took soundings, found deeper water toward the stern, and let out the anchor chain until the vessel was in deep water, where she rode quietly until morning. The voyage was thereafter completed, and the crew received their wages. *Held* that, even if the master intended to abandon the ship, those who remained were not entitled to salvage, for the danger was not extreme, and their services were but the ordinary services of skillful seamen. The Blaireau, 2 Cranch, 240, The Umattilla, 29 Fed. 252, and The Triumph, Fed. Cas. No. 14,183, 1 Spr. 428, distinguished.

This was a libel against the schooner C. P. Minch, filed by certain of her crew to recover salvage.

Coxe, District Judge. On the 19th of September, 1893, the three-masted schooner C. P. Minch, having a cargo of about 639 tons of stone, set sail from Portage Entries, a port on Lake Superior, destined for Buffalo. Her crew consisted of a master, mate, cook and four seamen. There were also on board two passengers. On the afternoon of the 21st she reached Whitefish Point. The wind was blowing strong from the southeast and it was difficult if not impossible to round the point in the face of the heavy sea and strong head wind. In these circumstances she dropped anchor under the lee of the point about a mile from land in four and one-half fathoms of water. The schooner drew 13 feet. About midnight the wind died down, the glass fell and everything indicated a coming storm. Shortly afterwards the wind veered around and blew hard from W. N. W. A heavy sea was running. It was a rainy, dark and squally night. The vessel swung around towards the shore and her bow commenced pounding on a bar of sand and gravel. The captain then told the crew to get ready and go ashore in the yawl. The libelants, the cook and the two passengers remained on board. The captain and three men succeeded in landing in safety. Shortly after the captain departed, the libelant Talbert, who was the mate, after sounding and discovering that there was deeper water amidships and at the vessel's stern, let out more anchor chain and she went over the bar in 22 feet of water and there lay quietly until the morning. The wind grew lighter about three o'clock and fell gradually until daylight.

During the afternoon two fishing tugs were anchored near the point. On landing the captain went in search of these tugs and was informed that they were then on the other side of the point. He thereupon procured a lantern and went through the woods to obtain the assistance of one of them for the schooner and crew. The master of the tug declined to go out until daylight, but did, in fact, start about 5:30 a. m., just as day was breaking. After some maneuvering the tug make fast to the schooner and with the assistance of the latter's sails pulled her into the lake. The schooner then set sail, rounded the point and proceeded on her journey to Buffalo. The captain and the three men who had gone ashore, followed the schooner in the tug and after signaling her twice the schooner hove to and they were taken aboard, the master assuming command. On reaching Buffalo all the crew, including the libelants, received their wages.

The libelants concede the general rule that mariners cannot libel their own vessel for salvage. It is, however, contended that these libelants are within the exception recognized by The Blaireau, 2 Cranch, 240; The Umattilla, 29 Fed. 252; and The Triumph, 1 Spr. 428, Fed. Cas. No, 14,183. In each of the cases cited there was no doubt regarding the following propositions: First. The vessel was seriously injured and in imminent peril. Second the master and crew had deserted her. Third. The voyage was actually broken up and no wages were received. Fourth. The libelants' services were of the most meritorious character. They braved great dangers, suffered the severest hardships and saved or contributed to save the ship from destruction.

In the case at bar, on the contrary, there is the gravest doubt upon each of these propositions. The Minch was in no sense a wreck; she had received no injury; she was not leaking to any appreciable extent; she had lost no part of her tackle and when the master left her she was as stauuch and strong as at any time during the voyage. There was absolutely no reason for abandoning her *sine sps revertendi*. The shifting of the wind placed her in a dangerous situation, that was all. If the wind had increased and if the anchor had failed to hold she might have been stranded. The situation was critical but not desperate. It demanded men of ordiuary honesty, skill and bravery. It is true that the schooner was pounding on the bar of sand and gravel, but this difficulty was quickly relieved by the libelants. It required nothing but ordinary seamanship to use the lead, and, having ascertained the depth of the water, to relieve the vessel by shortening or lengthening the anchor chain as the circumstances required. Any seaman would expect to render such services as part of his vocation. After reading the testimony I am convinced that it required fully as much courage to embark in the master's yawl and attempt to make a landing through the breakers as to remain on the schooner.

Very little is said in either brief as to the action of the two passengers, but to my mind their conduct is very persuasive upon this question. They were under no obligation to the vessel. They had nothing but their own safety to consult. They could go or stay as they pleased, and yet they deliberately preferred to remain. That there was no real danger at the time the master left the schooner is sufficiently proved by the libelant Talbert. He testified:

"Q. I suppose you were very much frightened when the captain left the vessel? A. No, sir; I was not. Q. Why not? A. Because I thought she could be saved; if a man worked her right she could get off. Q. My question was why you were not frightened. A. Because there was nothing to be frightened at."

To find on these facts that the captain left intending to abandon the vessel is to convict him of lunacy or barratry.

There is testimony of language used by the master and some acts of his which tend to support the theory of the libelants, but taking into consideration the entire testimony and particularly his action with reference to the tug I am compelled to think that it was his purpose to save the schooner if possible. Assuming him to be a man of ordinary honesty and common sense it is simply incredible that he intended to abandon her because she was in a position of danger. But even upon the assumption that the master abandoned her, either because he was panic-stricken or deliberately and willfully intended to wreck her, his conduct did not absolve the libelants from their duty to the vessel. The services which they rendered were the ordinary services of skillful seamen. The vessel had a right to them by virtue of the existing contract. Rev. St. U. S. § 4525. It would, in my judgment, be a most dangerous precedent to hold that a seaman is entitled to salvage each time he extricates his vessel from an awkward or hazardous situation. That these libelants did anything more than was required of them by the situation I cannot believe. Their wages have been paid in full and they have no claim for anything further. The Neptume, 1 Hagg. Adm. 227, 237; Miller v. Kelly, 1 Abb. Adm. 564, Fed. Cas. No. 9,577; The Dodge Healy, 4 Wash. C. C. 651, Fed. Cas. No. 2,849; The Franklin, Blatchf, & H. 525, 543, Fed. Cas. No. 11,646; The John Perkins, 21 Law. Rep. 87, Fed. Cas. No. 7,360; The Wave, 2 Paine, 131, Fed. Cas, No. 17,300; 2 Pars. Shipp. & Adm. 264; Cohen, Adm. 55, 56.

The libel is dismissed.—Fed. Rep., Vol. 61, No. 5.

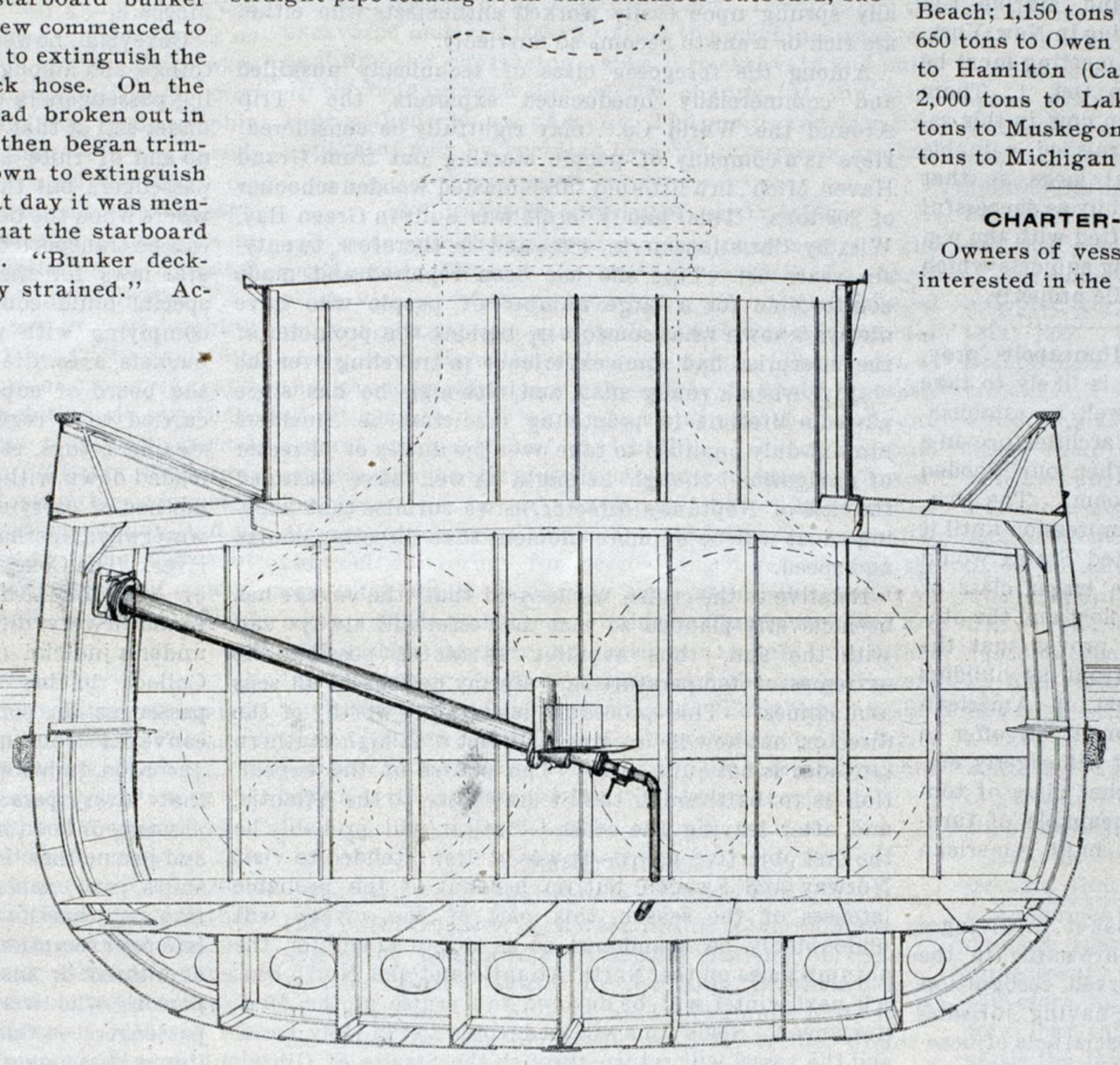
INTERPRETATION OF LLOYD'S POLICIES AS TO BURNING OF SHIP.

The plaintiffs were the owners of the steamer Glenlivet, and the defendant is an underwriter at Lloyd's. An action was brought to recover the defendant's portion of claims made by the plaintiffs on their time insurance policies on the before mentioned ship. The claims were made for damage sustained on three several and separate voyages, made when the insurances were in force. Of the two policies granted, one was dated the 26th of August, 1891, and the other on the 25th of August, 1892, and they insure the steamer for time, and have particular valuations of the hull and materials and machinery and boilers. The printed clause ends with the word "stranded"—the words "sunk or burnt" are added as is commonly done in writing. On the voyage in May, 1892, it was noticed that the cross bunker was on fire, which meant that the coals in it had heated. Part of the coal was discharged, and water was pumped on the fire to extinguish it. On the 29th of the same month it was again noticed that the port bunker was on fire, and means were adopted to put it out by pumping water on it. Although there was some heating of the fuel which was extinguished by pumping water on it, there was no damage to the structure of the ship, or any part of such. On the second voyage, in July, the starboard bunker was found to be on fire, and the crew commenced to take coal out and pump water down to extinguish the fire, and in doing so burnt the deck hose. On the second day they noticed that a fire had broken out in the starboard bunker again, and they then began trimming the coal and pumped water down to extinguish the fire, and it was stated that on that day it was mentioned in the engineer's log book that the starboard side bunker was on fire and aflame. "Bunker deck-plate slightly buckled, seams slightly strained." According to the survey report after this voyage, it was observed that the "second strake plate of bunker 'tween deck abaft bunker hatch was buckled downwards, the angle iron round bunker hatch buckled, the plating of bunker side and main shell plates and frames for twelve feet, with paint burnt off, coals inside bunkers required to be moved to effect the repairs, estimated about ten tons of coal destroyed. Saw some of the coal which had been fired converted into coke." On the fourth voyage it was noticed that the cross bunker was on fire, and it was extinguished in an hour by throwing buckets of water thereon. This accident is described in the engineer's log book as follows: "All hands called out to extinguish a fire in the bunker, plates buckled badly, and split." It is also stated in the surveyor's report of the damage done on this voyage that "one plate and angle bar in cross bunker (hatch bulkhead) buckled and broken, rivetting started, brick and wood casing destroyed, also fire hatches and one fore and aft donkey funnel damaged, buckled and bent." The claim on the first voyage was for a small average loss under three per cent., from other perils than fire, and on the second and fourth voyages for small average losses to the ship herself, under three per cent., partly from fire and partly from other perils insured against. It was agreed that if the ship was "burnt" on any of the before mentioned voyages, the plaintiffs were entitled to recover for a loss occurring on the voyage or voyages on which the burning occurred, and that if she was not "burnt" they are not so entitled. Mr. Justice Barnes, of the British courts, decided that on none of her voyages was the Glenlivet burnt within the meaning of the policy in this case, and therefore the defendant is entitled to judgment with costs, because, according to the interpretation of the memorandum in Lloyd's policies, a ship is not "burnt" unless the injury caused by fire is sufficient to result in such an interruption of the voyage as to make the ship for the time incapable of being properly used for the purposes of her voyage, and that this condition may be described as "temporarily unnavigable." This the learned judge added that "on the first voyage the coals heated slightly, and, water being poured upon them, whatever fire existed was extinguished. Even assuming that coals are to be treated as included in the word 'ship,' which the plaintiffs, alleged, and the defendant did not deny, there was no interruption of the voyage, nor any interference in any way with the navigation of the vessel. On the second and fourth voyages the heating of the coal caused some damage to the structure of the vessel, but again there was no interruption of the voyage, nor any interference with the vessel's navigation." This decision has been affirmed by the English Court of Appeal.

KIRBY'S PATENT ASH EJECTOR.

(ILLUSTRATED.)

As seven-eighths of all new American steam vessels have been, or are being, fitted with ash ejectors it will interest engineers and shipbuilders to learn that the U. S. patent (No. 522,119) has been given Frank E. Kirby, the well-known constructing engineer of the Detroit Mich., Dry Dock Co., for an ash ejector, which we illustrate herewith. The inventor's claims are as follows: 1. In an ashes ejector, the combination of a hopper having sides at right angles with each other, and an opening in the lower corner of a chamber of greater area than said opening connected with said hopper, a nozzel adapted to deliver a stream of water centrally through said chamber close to the corner of said harper, and a straight pipe leading from said chamber outboard, substantially as shown and described. 2. In a device for removing ashes from a ship's fire room, the combination of the injector G having a nozzle h opening f and counterweighted, valve F, and means for forcing a stream of fluid through said nozzle, with the hopper E opening into said ejector, a discharge pipe D, and a valve b, substantially as and for the purposes set forth. 3. In a device for removing ashes from a ship's fire room, the combination of the ejector G having a nozzle h, means for forcing a stream of fluid through said nozzle, the hopper E opening into said ejector, a discharge pipe D provided at its outlet end with a valve b, the opening f in the lower side of the ejector, and an outwardly opening valve F normally closing said opening but automatically yielding under the pressure of the water contained in the pipe D to permit its escape therefrom upon the stoppage of the ejector, substantially as described.



THE KIRBY ASH EJECTOR.

BUFFALO COAL TRADE.

The following statistics of the coal trade of Buffalo are furnished by Mr. William Thurstone, the secretary of the Merchant's Exchange:

Receipts by railroads not reported by request.—Receipts by lake, none. Shipments of coal by lake for the month of June, 384,663 net tons, as compared with 391,580 tons in 1893, and 374,096 tons in 1892; for the season to July 1, 726,407 net tons, as compared with 933,050 tons in 1893, and 778,439 tons in 1892. The receipt of coal by canal for month of June, 1,785 net tons, as compared with 8,885 tons in 1893, and 266 tons in 1892; total receipt to July 1, 1,785 net tons, as compared with 13,445 tons in 1893, and 409 tons in 1892. The shipment by canal for month of June, none, as compared with 2,534 tons in 1893, and 3,758 tons in 1892; total shipments to July 1,461 net tons, as compared with 8,830 tons in 1893, and 10,490 tons in 1892. The shipment by lake westward from opening of navigation to July 1, in 1894, shows a decrease, of 206,643 net tons under 1893, and an increase of 42,023 net tons over 1892. During June, this year, the ruling rates of freight were 45 cents to Chicago, 40 cents to Milwaukee, Green Bay, and Sheboygan, 15 @ 25 cents to Duluth and Lake Superior ports, 25 cents to Toledo and Detroit, 45 cents to Racine, and 35 cents to Bay City and Saginaw, and for corresponding period in 1893, to Chicago, 60@50 cents; to Milwaukee, 55@45 cents; to Duluth and Lake Superior ports, 30@25@30 cents; to Green Bay 50@40 cents; to Toledo and Detroit; 30 cents; to Racine, 60@55 cents; to Saginaw, 45@40 cents, and to Bay City, 40@30 cents. The distribution of coal by lake thus far this year was as follows: 306,510 net tons to Chicago, 166,944 tons to Milwaukee; 75,090 tons to Duluth; 72,454 tons to West Superior; 9,200 tons to Gladstone; 29,035 tons to Toledo; 13,370 tons to Racine; 3,900 tons to Hancock; 1,300 tons to Houghton; 800 tons to Kenosha; 11,185 tons to Green Bay; 3,400 tons to Detroit; 3,775 tons to Bay City; 9,525 tons to Saginaw; 8,190 tons to Port Huron; 2,290 tons to Sheboygan; 3,069 tons to Fort William; 200 tons to Alpena; 2,080 tons to Manitowoc; 600 tons to Benton Harbor; 600 tons to Sand Beach; 1,150 tons to Ludington; 2,190 tons to Cheboygan; 650 tons to Owen Sound; 850 tons to St. Clair; 380 tons to Hamilton (Canada); 1,900 tons to Sault Ste. Marie, 2,000 tons to Lake Linden; 400 tons to St. Ignace; 650 tons to Muskegon; 400 tons to Sault Ste Marie, and 650 tons to Michigan City.

CHARTER-PARTY AND BILL OF LADING.

Owners of vessels, shippers and consignees will be interested in the following case touching the powers of a charter-party and bill of lading. The case is that of an Austrian vessel which recently arrived in London with a cargo of wheat from Adelaide. Her charter—the Adelaide standard charter-party for grain cargoes — contained a very full negligence clause, the wording of which appeared to afford the owner the completest exemption. Some of the cargo on landing proved to be damaged, and the consignee made a stand against it, and the case came up before the City of London Court for trial.

The master of the vessel confidently put in the charter party, containing the exemption clause, and the consignee with equal confidence put in the bill of lading. This latter document, by the way, did not contain a negligence clause. It merely intimated in its terms that "freight and all other conditions" were as per charter-party. The result of the case was that the ship owner was found liable to the extent of several hundred pounds. He pleaded that his charter-party contained afull negligence clause.

In effect the court replied as follows: "The charter-party is a contract between the owner of the vessel and the shipper of the cargo. The consignee knows nothing of that document. He looks only to the bill of lading, which contains no negligence clause." On the shipowner pointing out that in the bill of lading it was stipulated that freight and all other conditions were as per charter-party, the judge said that "freight" in the case meant rate of freight and "other conditions" meant lay days, etc. He further said that the negligence clause was not imparted by this wording from the charter-party in the bill of lading.

Commenting on this case *London Fairplay* says: "The foreign shipowner has come to the conclusion that charter-parties and bills of lading should be printed on opposite sides of one and the same document. In this he takes an extreme view. A charter-party is a document which holds charterer and shipowner together. A bill of lading is, so to speak, the charter-party between the shipowner and the consignee. In the present case the bill of lading should have stipulated that freight and all other conditions and clauses should be as per charter-party. It seems, however, extraordinary that the charter-party, which is the real contract between ship and cargo, should be superseded by the bill of lading—a mere receipt."

The owner of the ship was informed that he had no defense under the negligence clause against the consignee. The Court, however, appeared to think that he might have recourse against the shipper. But it is said that the charter-party was so worded as to relieve the shipper of all liability on the shipment of the cargo.

THE MARINE RECORD

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CLEVELAND, O., JULY 26, 1894.

THE Society of Naval Architects and Marine Engineers will hold their next annual meeting in New York, in November. Papers to be read at the meeting must be submitted to the secretary not later than Oct. 1. There is a powerful and influential membership now in this association, and their initial meeting furnished valuable data for the profession and technique at large, so that we hope the November meeting will be fully as successful as the first one, and that all members gifted with the pen will contribute liberally to the interesting subjects which trained experts alone know how to handle properly.

THE recent trial trip of the U. S. S. Minneapolis proving her to be the fastest war ship afloat is likely to take the conceit out of English builders, as well as establishing the reputation of American marine architecture on a similar basis to what it was years ago when our wooden packet and clipper ships "carried the broom." The Britishers fondly and jealously nursed the impression until it assumed the form of fact that the United States would never be able to successfully build the larger class of battle ships, but the new navy already afloat and the others in course of construction amply proves that the United States is clearly forging to the front as builders of naval tonnage, and the next time that an American builder tenders to the British government an offer to build a naval vessel or vessels perhaps it will eagerly embrace the opportunity to secure the higher class of tonnage which their workmen now seem incapable of turning out in competition with the latest built American war vessels.

THE brave act of Captain Julius Baker in diving a second time and rescuing a boy from drowning in the Chicago River, this week, calls for deserved recognition at the hands of the Federal department having jurisdiction over the awarding of medals for special acts of heroism. A prompt and efficient acknowledgement of such brave deeds tends to promote a worthy spirit of emulation in the saving of life, though we are sorry to say that hitherto numbers of cases wherein marked acts of gallantry have been displayed have been allowed to pass by without that recognition which the best government in the world such delight in assigning to those of her citizens who risk their lives to save others. It may be, that as big bodies move slowly, so does this branch of the Treasury department design to prove itself somewhat unwieldly. If such are the facts, the sooner a national humane society is organized by private citizens the better it will be for the cultivation among our citizens of that spirit of emulation to excel in deeds of bravery of which we have mention this week in our Chicago correspondence.

THE Vigilant's sailing is a perfect enigma to yachtsmen on this side of "the pond." In the dozen races already sailed victory for the Yankee yacht was several times within her grasp when the Britisher capped the climax by what now appears a mysterious way of getting over the ground, although the Vigilant's chances for holding the advantage at the time, seemed equal. There are no two opinions regarding the Vigilant's work. She is not the boat she was previous to crossing the Atlantic, and probably the whole secret of her present lack of speed is contained in the statement that several tons of strength and fastenings were put into her before she left New York to go across. This extra material has taken the spring or easy working qualities out of the hull, and reduced her speed under nearly all conditions of sailing as well as handling. The present contests will have little or no bearing on the merits of the several types or models as the former undoubted superior qualities of the Vigilant are now questioned through her loss of nine races out of twelve.

AN AROUND THE WORLD TOUR.

There are numbers of ways and means for an individual or a party to make a trip around the world for pleasure, notoriety, financial profit or in the interests of science. Amateurs and men who perhaps in their early days received a smattering of navigation and imbibed crude ideas of the condition, skill and occupation of seamen, yearn after a lapse of time to expedite their conceived notions of launching out and showing those who have been all their lives at the task, how to do it. For instance, a yachtsman recently felt disposed to fit out a handy schooner with the object of prowling around the Atlantic sighting and dismantling derelicts; furthermore, spare time was to be engaged in trading with the islands of the West Indies. Another genius thought that a good handy vessel (for, mind, the vessels must always be handy) would make a lot of money capturing sharks for their bone and oil on the west coast of Africa. Something was also said about the valuable white powder which in the form of a paste is secreted in the head of the fish, or rather, in the cavity of bone formation which sailors call "the bust." Hunting for treasure trove, wrecking expeditions guaranteed to reimburse by hundreds per cent. the lucky investors, and a long list of similar adventures for pleasure and profit is systematically sprung upon easily worked enthusiasts who either are rich or want to become so hurriedly.

Among the foregoing class of technically unskilled and commercially uneducated explorers, the "Trip Around the World Co." may rightfully be considered. Here is a company of people starting out from Grand Haven, Mich., in a little old three-masted wooden schooner of 203 tons. This "handy" craft was built in Green Bay, Wis., by Christianson in 1868, and is, therefore, twenty-six years old. True, she has been repaired and made comfortable for a large number of people who have always known what comfort is; besides, the promoter of the enterprise had some experience in traveling over the "briny" when a young man, and, although he has since passed a lifetime in practicing medicine, he considers himself duly qualified to take over the duties of "director of navigation," though he might as well have assumed the title of Neptune's director, as we surmise that keeping afloat will be of more moment than directing course and speed.

Relative to the cruise, we are told that "the voyage has been cleverly planned so that the vessel will always 'sail with the sun,' thus avoiding as far as possible the extremes of temperature and stormy periods in all seas and climes." This procedure is certainly worthy of the director, but how he is going to direct it in high southern latitudes is not quite clear. The course of the expedition is to be through the St. Lawrence to the Atlantic, and, after leaving the coast, Gibraltar will probably be the first objective point. It was at first intended to visit Norway and Sweden, but, on account of the probable lateness of the season, this part of the voyage will undoubtedly be abandoned so as not to encounter the autumn gales on the North Atlantic and the North Sea. All next winter will be devoted to a cruise of the Mediterranean. Some time will be devoted to the Holy Land, and the vessel will return through the Straits of Gibraltar, in order to avoid the heavy tolls of the Suez canal, and also to prolong the voyage to countries less frequently visited by ships of trade. The expedition will then round the Cape of Good Hope, coasting Africa to Madagascar, after which India, Ceylon, Burmah, Siam, China, Japan, the Philippine Islands, the East Indies and Australia will be visited, and from group to group of the islands that dot the South Pacific the schooner will sail towards home until, by a long voyage from the Hawaiian Islands, she will touch the American continent again at Alaska, thence down the west coast, through the Straits of Magellan, along the coast of Central America, Mexico and the United States, the Wrenn will sail until she reaches the St. Lawrence. The running expenses of the voyage or cruise are to be paid by occasional trading from port to port. It is intended that the three years' voyage will be the longest in nautical miles ever planned by man, and that the schooner shall visit more ports than ever were touched in one cruise by any known craft since the dawn of navigation. To which may be added, by way of a benediction, "the Lord help them," for, as Jack truly observes, those who go to sea for pleasure are ready to go to Hades for pastime, unless, indeed, they want to wear out their old clothes. Certainly it is not want that sends them to sea, as they do not appear to have been in the class of citizens who have a long category of wants ashore.

As we have said, there are numerous ways of globe trotting, yet, one of the slowest and most unsatisfactory, abounding with hardships and unknown dangers and troubles, is to be found in ferrying a small fore and aft rigged schooner over the oceans, and we venture to predict that the George H. Wrenn will never complete the course laid out for her. The idea of clearing disbursements by petty trading is also far fetched when it is considered that there are trading posts and means of commercial intercourse with adequate transportation facilities between all possible points united by water. This fact the expedition will no doubt find out early in their cruise, and then, after a few months of "batter fanging" around, losing money, besides wasting life undergoing solitary confinement with the privilege of making food for sharks, the weary and disgusted amateurs will gladly seek the readiest means of getting back to their Michigan homes, leaving trade, science and subjects for newspaper correspondence to be reached by some more regular means.

THE COXEYITES AS LAKE PASSENGERS.

It is entirely foreign from the lake marine to touch in any manner on the now well known Coxey movement, however much the deluded members might tramp, camp or intrude upon county or municipal rights and privileges. That the Coxeyites would infringe upon the laws regulating the carrying of passengers by water never dawned upon the lake marine community, and, as they seemed to be anything but a desirable class of citizens, it was not probable that reputable passenger lines would slash rates to accommodate a horde of nondescript human locomotives. Accordingly, we have not found until the past week any attempt of this hybrid population to use the lakes as a means of transportation towards their Mecca.

Coxeyism, however, appears to be teaching us lots of things, and among the number is the feasibility of carrying passengers in unlicensed tonnage and freight boats, under sail at that. The steamboat inspection service has no end of rules and regulations for steamers carrying passengers, but there is "a hole in the skimmer" somewhere when the northwestern division of the Coxey army can be transported over the lakes regardless of the general laws for the conveyance of passengers, and the special build considered necessary therefor, by simply complying with the equipment rules of having fire-buckets, axes, life preservers and yawls as prescribed by the board of supervising inspectors. Such a precedent carried to a regular business would permit of small steamers, tugs, etc., taking in tow a chain of barges loaded down with excursionists, and it appears that this method of carrying passengers is customary over certain waterways, perhaps more notably so on the Hudson river. The Coxeyites are passengers without the shadow of a doubt, although a late solicitor of the treasury found it very difficult to locate the term "passenger" under a judicial construction, notwithstanding, Mr. McCulloch, in his Commercial dictionary, says that "a passenger, in commercial navigation, is an individual conveyed from one place to another on board ship." Jacobson, in his work entitled "Laws of the Sea," says that "every person who pays a stipulated sum for his passage, or is on board in any shape, even free of charge, and has neither interest in the cargo nor belongs to the ship's crew, is a passenger." In considering the question as to how far a common carrier can lawfully stipulate for exemption from responsibility for the negligence of himself or his servants, the courts have recognized persons who were conveyed without compensation as passengers, so that, in any event, the five hundred Coxeyites as passengers so far from Duluth to Cleveland must be regarded in the light of *bona fide* travelers, and that they have been given the space required by law on board the vessels. Relative to the rights of barges to carry passengers, the steamboat inspectors are warranted in granting permits under section 4492, Revised Statutes, and sections 19 and 20, rule 3, Rules and Regulations of the board of supervising inspectors, yet no barge or schooner, whether enrolled or otherwise, can carry passengers while in tow of a steamer without complying with the terms of the above quoted section and rules.

It would seem, therefore, that barges may be used on the lakes for transporting passengers, and with properly constructed vessels for this service the future may develop a large passenger trade between near points at rates of fare never thought of in passenger lines hitherto.

THE oldest, most conservative and experienced vessel men on the lakes, as well as others less directly connected with shipping, when asked what is the future prospect of the lake carrying trade and general transportation progress, can simply hold up their hands and confess they don't know and can't even guess what it may arrive at in a decade hence. This week the Detroit built steel steamer Selwyn Eddy waltzed into Chicago river with a cargo of 4,252 tons of coal, and last week the Cleveland built steel steamer Alva discharged at the same dock the miniature coal mine represented by 3,972 tons of black diamonds. These two cargoes are the largest taken into Chicago only because the draft of water is limited to almost ballast trim for coast and ocean carriers. Given two or three feet more water and the record would easily ascend to a 5,000 ton cargo. As it is, 8,224 tons loaded, transported and discharged in a few days is indicative of the future possibilities of lake commerce. J. J. Hill, president of the Great Northern railroad, promised to build 5,000 ton ships when there was twenty feet of water

at the shoalest connecting points of the lakes, but other owners are already coming near the cargo quoted on the measly seventeen feet draft now obtainable. Such cargoes as the foregoing, tell very pointedly the owners of medium sized tonnage to get into a special trade, as it will soon be ruinous for anything carrying less than 3,000 tons to compete with these large, high-classed steel ships, a couple more of which are nearly ready for launching at Cleveland. To the owners of schooners, from the canaller to the very largest afloat, whether for the better or worse, we are fain to confess that the days for keeping their floating property out of debt are numbered. Steamers of the biggest and best type procurable are to be the freight earners and dollar grabbers of the future.

THE lakes and their industries, also their physical geography and their contents, are beginning to receive that National and State attention to which they are so eminently entitled. Recently the Weather Bureau, Department of Agriculture, issued a chart and gave statistics showing the number of wrecks and loss of lives occasioned through stormy weather conditions, this we believe was the first wreck chart ever published in the United States, Following the wreck statistics a valuable publication was issued by the same bureau, showing the general trend of currents, and the economy going on in the movement of surface waters over the five great lakes as deduced from the trend of floating bottles which were left to drift around as silent messengers until their mission had been fulfilled. The United States Hydrographic Office, Navy Department, learning that there was so rich a field to develop in their special work on the lakes established within the year a branch office at Chicago which is now in full working order and arrangements have been entered into for the installation of a second branch office at Cleveland, O. The United States Fish Commission have now officials on the ground learning all about the characteristics of the lakes in their relation to the finny tribe, also the best means of conserving and propagating the various species habiting all districts. The State of Ohio has sent out this month two special agents attached to the Ohio Bureau of Labor Statistics, to make a report on the industrial situation connected with Ohio shipping, commerce and transportation, and so the good work goes on. It is also with some degree of pardonable pride that THE RECORD takes to itself a share of credit for arousing interest in these several laudable studies and investigations.

COALS to Newcastle is only a circumstance compared to carrying wheat from Lake Erie ports west to Chicago. This week a very remarkable situation was evidenced in lake traffic by a west-bound steamer carrying wheat to Chicago at 1¾ cents a bushel freight, and meeting down-bound steamers from that port for Buffalo, carrying the same commodity a much longer distance, at ⅞ of a cent per bushel. Brokers explain the situation by stating that wheat is held in Chicago at 2 to 3 cents per bushel higher than prices prevailing in the Toledo or Detroit markets, and that there is still a margin of profit in paying charges and freight both ways. This inequality of value of the product and the movement of commerce, hinges upon and is distinctly controlled by the low rates of freight vessels are taking at Chicago. The same conditions may be brought about any time when transportation charges are made regardless of distance, and if the freight from Chicago to Buffalo equalled or exceeded the charges from Toledo to Chicago, as they certainly should do, such a singular movement of wheat as that above chronicled could not have taken place. The point sought to be brought out in the foregoing is that some means ought to be devised for the better regulation of lake freights and only a measure of unanimity of interests in the carrying trade might easily accomplish this end.

LAKE FREIGHTS.

Ore rates are unchanged and while the ore is being carried from the head of Lake Superior at rates ranging from 60 to 80 cents, single trips are still quoted at the 60 cent rate, Marquette 50 cents and Escanaba 40 cents.

The Chicago wheat rate is still down at the low notch of ⅞ cent to Buffalo or Port Huron, though the line boats are holding for the 1 cent rate. Several cargoes of wheat have been shipped from Toledo to Chicago during the week at freights from 1 to 1¾ cents.

Buffalo coal rates are steady at last weeks quotations, 45 cents to Chicago, 40 cents to Milwaukee, 25 cents to Toledo, Detroit or the head of the Lakes. The movement in coal from Ohio ports is steadily increasing, but rates are no better, although considerable figuring is being done to maintain fair freights. Milwaukee is quoted at 40 cents, Green Bay 50 cents, Duluth, Gladstone and the "Soo" 35 cents, though Canadian north shore ports are held at 40 cents.

Canal freights to New York are strong at 3¼ cents on wheat, with an expected raise of another ¼ cent in a day or two.

LIGHT KEEPERS APPOINTED.

The Secretary of the Treasury has made the following recent appointments: Alfred A. Reed, first assistant and Michael J. Cain second assistant keepers of the light station at Passage Islands; James Carson, keeper at Eagle Harbor range; James Dooley, second assistant at Manitou light station; Frank Eddy, assistant at Royale light station and Frank F. White, assistant keeper at Granite Island light station.

STAGE OF WATER AT ST. MARY'S FALLS CANAL.

DEPARTMENT OF AGRICULTURE, WEATHER BUREAU.

Depth of water at the St. Mary's Falls Canal for the week ending July 26, 1894:

July	19	8 a. m.,	15	feet	0	inches.	8 p. m.,	15	feet	2 inches.
"	20	"	15	"	2	"	"	15	"	0 "
"	21	"	15	"	0	"	"	14	"	11 "
"	22	"	15	"	0	"	"	15	"	0 "
"	23	"	14	"	11	"	"	15	"	1 "
"	24	"	15	"	0	"	"	15	"	1 "
"	25	"	15	"	2	"	"	15	"	1 "
"	26	"	15	"	1	"	"			

NEW TYPE OF DREDGE.

A large hydraulic dredge is being build at Benton Harbor by F. A. Blackmer, which is something new to the lake region in the way of dredges. It will carry the excavated matter 2,000 feet from the machine, thus enenabling the contractor using it to excavate and build up the land on each side of the channel at the same time, without the use of scows. The pumps and dredging apparatus will be operated by a 50-horse-power engine.

ST. LAWRENCE RIVER BUOYAGE.

In answer to the claim of masters of steamers of the Ogdensburg Transit Co., that buoys in St. Lawrence river, vicinity of Cross-Over light, are misleading as at present placed, Commander James G. Green, inspector of the tenth light-house district, says: "The buoys as they are now placed mark the safest channel for vessels of all classes, and were placed after a thorough and careful examination of the locality. I made a personal examination at the same time, and consider the present location of the boys the safest and best. The recently discovered obstructions in the old channel made that channel dangerous for deep draught vessels, and the present channel is equally convenient with plenty of room. All the channels of the St. Lawrence river are very much straighter and easier to navigate than either the Detroit or St. Mary's river, and the steamers very much smaller and easier to handle. The change is simply a change of channels, made necessary by the many dangers of the old channel, and for the safety of vessels, which is the sole aim of the light-house service."

AMPLITUDES.

The following approximate amplitudes of the Sun's rising will be given each week in this column during the season of navigation: A second bearing of the Sun may be taken at sunset by reversing the bearings to read west instead of east, as, for example, N. E. by E. for a sunrise bearing would read N. W. by W. for a sunset, or E. 30° N. to W. 30° N.

LAKE ERIE AND S. END LAKE MICHIGAN. LAT. 42° N.

Sunrise.	Bearing (degrees)	Bearing (points).
July 28	E. 26° N.	NE. by E. ¾ E.
Aug. 5	E. 23° N.	NE. by E. ⅞ E.

LAKE ONT., S. END HURON AND CENTER LAKE MICHIGAN LAT. 44° N.

Sunrise.	Bearing (degrees).	Bearing (points).
July 28	E. 27° N.	NE. by E. ⅝ E.
Aug. 5	E. 24° N.	NE. by E. ⅞ E.

N. END LAKES HURON AND MICH. LAT. 46° N.

Sunrise.	Bearing (degrees).	Bearing (points).
July 28	E. 28° N.	NE. by E ½ E.
Aug. 5	E. 25° N.	NE. by E. ¾ E.

LAKE SUPERIOR. LAT. 48° N.

Sunrise.	Bearing (degrees).	Bearing (points).
July 28	E. 29° N.	NE. by E. ⅜ E.
Aug. 5	E. 26° N.	NE. by E. ¾ E.

With a compass correct magnetic, the difference between the observed and true bearing will be the variation for the locality. If there is any deviation on the course the vessel is heading at the time of taking the bearing the result after the variation is applied will be the amount of deviation on that course.

NOTICE TO MARINERS.

Notice is hereby given that the star buoy reported adrift from Sand Point, off Escanaba, Mich., has been replaced.

By order of the Light House Board.

J. H. DAYTON,
Commander, U. S. N., Inspector 9th Light House Dist.

THE Dominion deputy minister of railways and canals denies the report that the masonry of the Canadian Soo canal is defective and says the opening of the lock will take place some time next month.

ABANDONMENT.

The case of the Thornholme, tried before Mr. Justice Barnes, raised the question of abandonment and constructive total loss as between shipowner and underwriter, and the principles which govern this class of case may well be shortly regarded. It appears that the steamer Thornholme was stranded in the St. Lawrence, in July, 1890. After remaining some twelve days on the rocks she was got off and taken to Quebec, where she was found to have sustained some very serious damage. The salvage cost some £3,000. At Quebec there is only one ship repairer, Mr. Davie, who was capable of executing the repairs necessary in this case, and he would not bind himself to execute the work, either for the sum which he and other experts estimated, £12,000, nor would he bind himself down as to time in which such repairs should be completed. The hull of the ship was insured for £12,000 only, but it was urged by the underwriters interested in the present action that she would really be worth some £17,000 when the repairs were finished. This sum, however, was arrived at without due regard to the ship's history, and it included the money to be made by her homeward freight. In the event the owners abandoned her, and Mr. Davie bought her by tender for some £2,400. He did not make much by his bargain. Without reckoning for his fair profit on the job of repairing, or for the rent of his dock whilst the work was progressing, he spent £10,000 over it, and then only obtained some £12,000 for her, and not all of that in cash. If the bona fide of all these transactions be supported—as Mr. Justice Barnes did, and as we think he could not fail to do—it seems obvious that the repairs of the ship did in fact cost more than she was worth when repaired.

The underwriters on the hull and on the freight accepted the situation, and paid as on a constructive total loss. Those on advances, however, refused to accept their liability, and hence the action we are discussing. They would not be liable unless a total loss, either actual or constructive, did, in fact, occur. They based their defense on the grounds that the proper notice of abandonment was not given, and that the sale was not, under the circumstances, justified. They sought to get out of the stern logic of what happened after the sale by a suggestion that, though Mr. Davie was certainly a very clever ship repairer, his ability was confined to his actual work, and that he had been induced to accept a ridiculously low sum for the ship after he had restored her. As we have already indicated, this suggestion did not find favor. The judge found as a fact, that the plaintiffs had reasonable ground for believing that the cost of repair would exceed the value of the ship when the work was finished, and, that being so, he gave judgment for the owners.

As to the law of this class of case generally, it may be said that the point as to the giving of notice of abandonment is disposed of by the fact that "where the damage sustained makes the loss a total loss, it is unnecessary to give notice of abandonment." Finding, therefore, as the learned judge did, that there was a total loss, this point fails. Three somewhat old cases settle the law on the question as to where an abandonment is justified. These were all pre-cable days. They therefore discuss the question of what the master may or may not do. We must take it that where cables exist—and nowadays they are almost universal—the master has to consult his owners before acting, and that the rights and duties are thus transferred to them. Thompson v. Colwin was very much such a case as the present. There, as here, the time of year was against the facility (and, therefore, against the cheapness) of executing the work. There, as here, the vessel in question had already passed her first youth. There it was held that, as it would cost more to repair the vessel than she would be worth when repaired, her abandonment was justified. Robertson v. Clarke affirmed the same principle where the cost of repair would far exceed her original value, and events have justified the sale, for the purchaser found it necessary to break the vessel up. The third case is perhaps the strongest of all. There it was said that to constitute a ship a constructive total loss, she "must lose her character as a ship and become a mere congeries of planks." It was held—in spite of the fact that her purchaser repaired her and that she subsequently made a voyage to this country—that at the time of her sale she had ceased to be a ship, and that the sale was justified because at the time it was reasonably considered that she was not worth repairing. The whole law on the point comes to this. The captain and those behind him have to do the best possible, according to their lights at the time, for all concerned. If it appears that the ship will repay the estimated amount to be spent on her, she must be repaired, and is a ship still, though possibly a very badly damaged one. If the cost of repairs will exceed her value when she is repaired, then she has ceased to be a ship and is a wreck (though it may be a locomotive one)—she has become a constructive total loss.—*Liverpool Journal of Commerce.*

LLOYD'S REGISTER SHIPBUILDING RETURNS FOR THE QUARTER ENDED 30 JUNE, 1894.

From the returns compiled by Lloyds' Register of Shipping, it appears that excluding warships, there were 398 vessels of 718,204 tons gross under construction in the the United Kingdom at the close of the quarter ended 30th June, 1894. The present returns of steamers under construction slightly exceed those of the previous quarter, and are the largest received since March, 1891. On the other hand, the returns of sailing vessels are lower than last quarter's and are the smallest since December, 1887.

Of the vessels under construction in the United Kingdom at the end of June, 347 of 633,812 tons (or over 88 per cent of the tonnage) were under the supervision of the surveyors of the Lloyd's Register with a view to classification by the society.

In addition to the foregoing, 15 vessels of 18,390 tons are reported as building abroad with a view to classification in Lloyd's register book. The totals of vessels building under the supervision of the society's surveyors, are thus, as follows:

	NO.	GROSS TON'GE.
Building in United Kingdom for home account and for sale	325	594,988
Building in United Kingdom for foreign and colonial account	22	38,824
Building abroad for foreign and colonial account, and for sale	15	15,390
Total building on 30th June for classification in Lloyd's register book	362	649,202

VESSELS "PREPARING."

As will be seen from the following figures, the returns of vessels "preparing" (*i.e.* ordered but not commenced,) show a large falling-off as compared with the exceptionally high level reached last quarter. For the purpose of comparison, the figures for a few preceding quarters are also quoted.

Vessels Preparing (in the United Kingdon.)	STEAM. NO.	STEAM. GROSS TONS.	SAIL. NO.	SAIL. GROSS TONS.	TOTAL. NO.	TOTAL. GROSS TONS.
30th June, 1893	53	104,080	11	16,688	64	120,768
30th Sept., 1893	75	169,326	12	19,871	87	189,197
31st Dec., 1893	90	154,085	13	22,536	103	176,621
31st March, 1894	108	247,238	14	24,070	122	271,308
30th June, 1894	74	155,633	6	10,300	80	165,933

The following details concerning the shipbuilding work of the United Kingdom during the past three months, may be added:

DURING QUARTER ENDED 30TH JUNE, 1894.	STEAM. NO	STEAM. GROSS TON'GE	SAIL. NO	SAIL. GROSS TON'GE.
Vessels commenced	150	265,056	19	22,960
Vessels previously commenced, but on which no further progress was made	8	10,665	14	3,869
Vessels launched	176	273 023	21	26,248

OWNERSHIP OF VESSELS UNDER CONSTRUCTION.

The following table apportions the vessels now under construction in the United Kingdom to the countries for which they are being built:

COUNTRY FOR WHICH INTENDED.	STEAM. NO.	STEAM. GROSS TONNAGE.
United Kingdom	269	558,349
British Colonies	3	2,500
Austria	1	3,500
Belgium	1	140
Brazil	1	240
Bulgaria	1	1,180
Chili	1	2,400
China	1	2,500
Denmark	1	1,700
Egypt	1	550
France	3	3,370
Germany	2	7,074
Greece	2	1,500
Hayti	1	400
Holland	1	2,800
Italy	1	3,060
Norway	2	6,260
Russia	3	2,300
Spain	1	1,276
United States of America	1	514
For Sale, or Nationality of Owners not stated	41	63,971
Total	338	665,584

In addition to the steam tonnage as given above there are thirty-two sail vessels of 26,397 tons building for British owners. And 25,779 for sale or where the nationality of the owners are not stated. Russia and Germany contribute each, one sailing vessel, bringing the total sail tonnage up to 52,620 gross tons and the total tonnage both sail and steam to 718,204.

WORK IN HAND IN PRINCIPAL DISTRICTS.

The following table gives the total figures for vessels now under construction at the principal shipbuilding centres of the country, as compared with those for the same period last year:

DISTRICT.	DESCRIPTION.	30 June, '94. NO.	30 June, '94. GROSS TON'GE.	30 June, '93. NO.	30 June, '93. GROSS TON'GE.
Barrow, Maryport and Workington	Steam	7	14,072	5	9,370
	Sail	5	9,850	7	9,548
	Total	12	23,922	12	18,918
Belfast	Steam	14	56,260	15	71,427
	Sail	..	.....	2	3,800
	Total	14	56,260	17	75,227
Clyde	Steam	101	206,481	80	153,129
	Sail	20	32,715	35	60,373
	Total	121	239,196	115	213,502
Hartlepool and Whitby	Steam	20	53,740	12	33,425
	Sail	..	.....	..	.....
	Total	20	53,740	12	33,425
Mersey	Steam	3	810	6	2,855
	Sail	1	130	5	3,150
	Total	4	940	11	6,005
Middlesbro' and Stockton	Steam	30	68,705	23	44,006
	Sail	2	420	1	600
	Total	32	69,125	24	44,606
Tyne	Steam	60	131,018	43	109,633
	Sail	..	.....	2	3,890
	Total	60	131,018	45	113,523
Wear	Steam	45	111,725	30	79,443
	Sail	..	.....	..	.....
	Total	45	111,725	30	79,443

WARSHIPS UNDER CONSTRUCTION IN THE UNITED KINGDOM.

In order to afford a comprehensive view of the shipbuilding in progress throughout the United Kingdom, the following statement of the war vessels which are at present under construction has been compiled. For this statement, it has been assumed that a vessel may be regarded as "under construction" from the commencement of the laying of her keel to the time when she is ready for her steam trials. Of course, when this latter stage is reached the guns have usually still to be placed on board, and the vessel to be fitted out, before she is ready to be commissioned; but she is nevertheless, structurally complete.

NATIONALITY.	DESCRIPTION.	AT ROYAL DOCKYARDS. YARD.	NO.	Displacement.	AT PRIVATE YARDS. YARD.	NO.	Displacement.	TOTAL. NO.	TOTAL. Displacement.
				TONS.			TONS.		TONS.
BRITISH	*1st Class Battle Ships	Chatham	2	29,800	Birkenhead	1	14,900	*8	116,650
		Pembroke	2	27,250	Clydebank	1	14,900		
		Portsmouth	2	29,800	.....	..	.....		
	1st Class Protected Cruisers	.....	..	.....	Barrow	1	14,200	2	28,400
		.....	..	.....	Clydebank	1	14,200		
	† 2nd Class Protected Cruisers	Chatham	2	9,960	Barrow	2	11,200	†8	41,080
		Devenport	1	5,600	.....	..	.....		
		Pembroke	1	4,360	.....	..	.....		
		Portsmouth	2	9,960	.....	..	.....		
	1st Class Torpedo Gunboats	Devenport	1	1,070	.....	..	.....	1	1,070
	** Sloops	Sheerness	2	1,920	.....	..	.....	**2	1,920
	‡ Torpedo Boat Destroyers	.....	....	.....	Barrow 3, Birkenhead 4, Blackwall 1, Chiswick 3, Clydebank 3, Cowes 3, Elswick 2, Govan 3, Hull 2, Jarrow 3, Pais'ey 2, Poplar 3, Sunderland 2	34	9,500	‡34	9,500
	1st Class Torpedo Boats	.....	....	.....	Poplar	3	320	3	320
	Total	.....	15	119,720	.....	43	79,220	58	198,940
FOREIGN OR NOT STATED	Cruiser	.....	..	.....	Elswick	1	4,000	1	4,000
	Torpedo Gunboat	.....	..	.....	Birkenhead	1	1,220	1	1,220
	Gun-Vessel	.....	..	.....	Elswick	1	850	1	850
	Torpedo Boat Destroyer	.....	..	.....	Poplar	1	255	1	255
	2nd Class Torpedo Boat	.....	..	.....	Poplar	1	13	1	13
	Total	.....	..	.....	.....	5	6,338	5	6,338
BRITISH and FOREIGN.	Total	.....	15	119,720	.....	48	85,558	63	205,278

* The Naval Estimates include two additional first-class Battle ships, to be built at Chatham and Portsmouth respectively, of 14,900 tons each.

† Four other second-class Protected Cruisers, of 5 600 tons each, have been ordered from private yards (Glasgow, 2; Govan, 2).

** The Naval Estimates include two additional Sloops, to be built at Devenport, of 1,050 tons each.

‡ Three other Torpedo Boat Destroyers have been ordered from Hebburn-on-Tyne.

CANADIAN ENTERPRISE.

Hon. George Foster, Finance Minister of Canada, has recommended the following: "That it is expedient to provide that the Government in Council may enter into a contract for a term not exceeding ten years with any individual or company, for the performance of a fast weekly steamship service between Canada and the United Kingdom, making connections with a French port, on such terms and conditions, as to carriage of mails and otherwise as the Government in council deems expedient for subsidy not exceeding $750,000 a year." The Minister of Finance went on to explain that there would be four new vessels equipped with all the modern improvements of a first-class line of steamships. The speed of the steamers are to be 20 knots an hour, and 10,000 tons carrying capacity.

THE CARE OF BOILERS.

An abstract of a paper from a German source on "The Internal Rusting of Boiler Shells," has been published in the Journal of the Society of Chemical Industry. This report commences with an account of the physical and chemical phenomena which promote and cause the formation of rust upon iron. The internal rusting of boilers is dealt with under two headings, namely, when the boiler is in use and when it is standing idle. The causes of rusting are first considered, the most important being the introduction of air with the feed-water. By properly placing the feed-pipe, namely, so that the feed-water enters the boiler near the low water level, and thus meets the hottest layers of water, the air is quickly expelled, and passes out of the boiler with the steam, unless pockets exist in which it can accumulate. Such pockets are sure to rust rapidly; and it is recommended that they should be covered internally with a protecting paint or filled up with cement, provided that they are not subjected to external heating. It is also recommended that the feeding should be completed before the withdrawal of steam ceases for the day, in order that the water left standing in the boiler over night may be as free from air as possible. An efficient circulation is also a means of preventing rusting, as it hinders the formation of air bubbles on the shell, which, if they remain clinging to it, cause rusting. The author is of the opinion that faulty construction is more often the cause of internal rusting than unfavorable conditions of working, and summarises the means of preventing rusting as follows: First, whilst the boiler is working, (1) Removing air from the feed-water before it enters the boiler. (2) Removing air from the water whilst in the boiler, and preventing its accumulation in pockets, etc. (3) Addition of chemicals to the feed-water. (4) Protective coatings applied to the inside of the shell. Second, whilst the boiler is standing idle, (1) Removing all moisture from the boiler, (a) by blowing it off whilst hot, (b) by producing an air current through it, (c) by placing hygroscopic bodies inside. (2) Direct protection of the shells, (a) by painting with tar, varnish, etc., (b) by covering with protective paints, and such an alkaline coating as milk of lime. (3) Protecting the shells from varying temperatures by keeping the draught in the flues constant, and so as to prevent moisture alternately depositing and evaporating on the shell. (4) Protecting the shell by completely filling the boiler with water from which all the air has been expelled.

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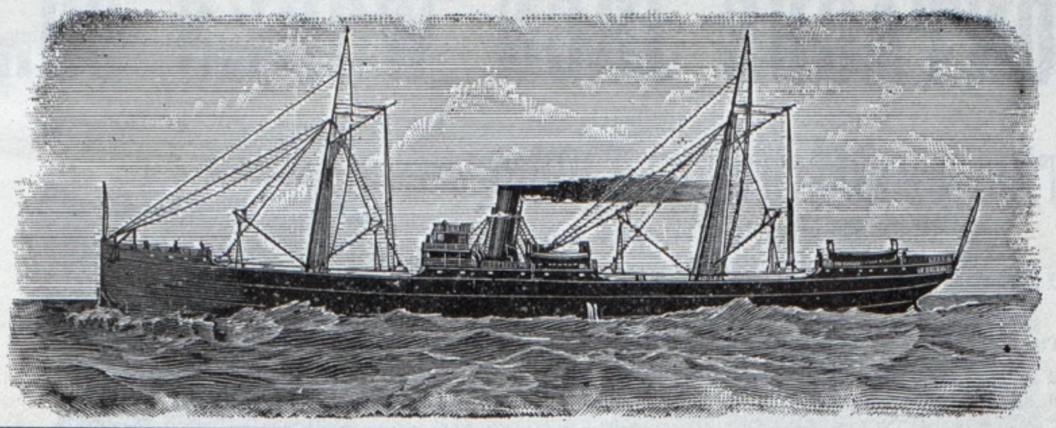

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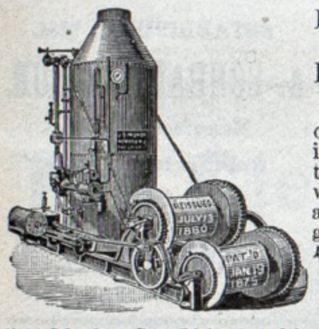

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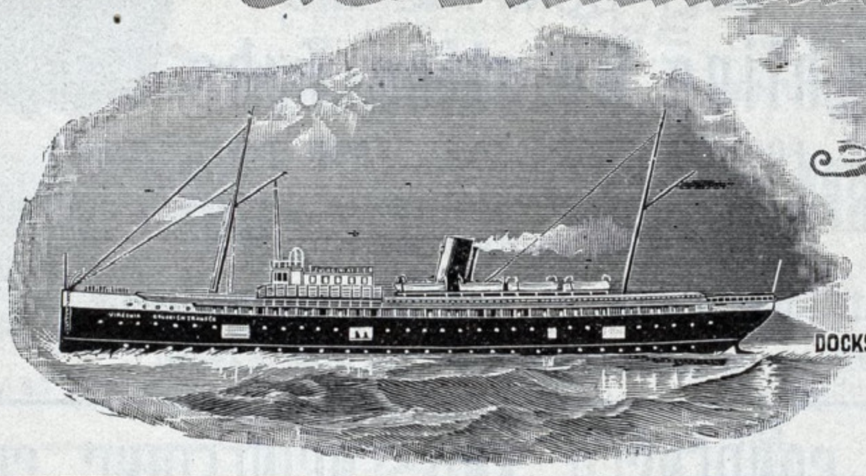

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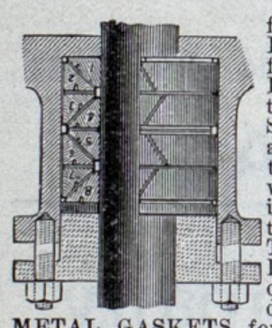

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U. S. ENGINEER OFFICE, Oswego, N. Y., July 7, 1894. Notice is given to all persons interested in wreck of schooner Christina, in Harbor of Sackett's Harbor, N. Y., that if within thirty days from date of this advertisement they shall not have notified this office of their intention and taken preliminary steps to remove said wreck as soon as practicable the wreck will be regarded as abandoned and derelict and will be removed by the United States in accordance with law. Sealed proposals, in triplicate, will be received here until 12 M. Saturday, August 7, 1894, for removal of abovenamed wreck. All information furnished on application. DAN C. KINGMAN, Capt. of Engineers. 27-30

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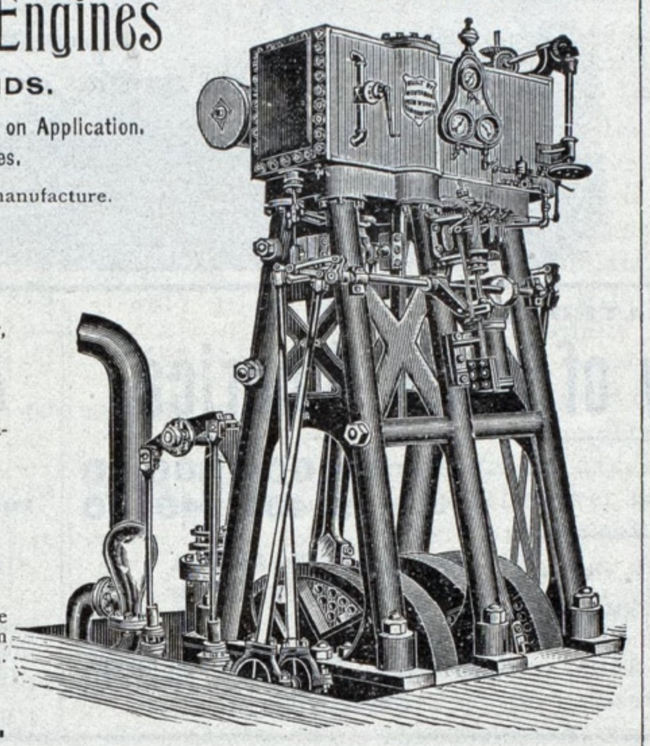

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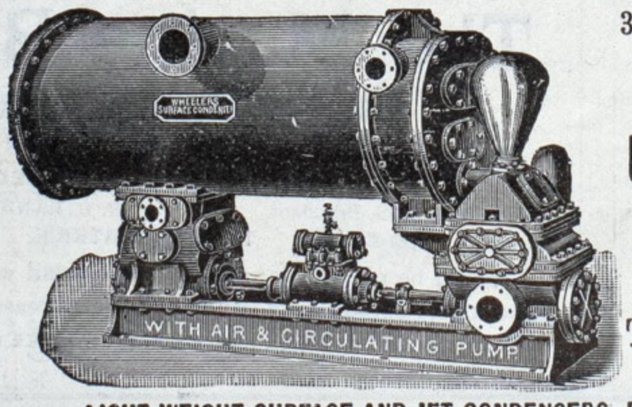

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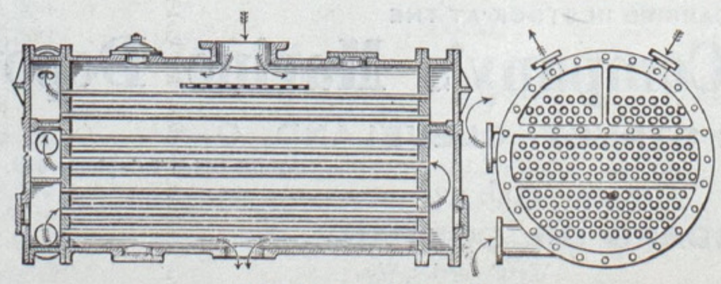

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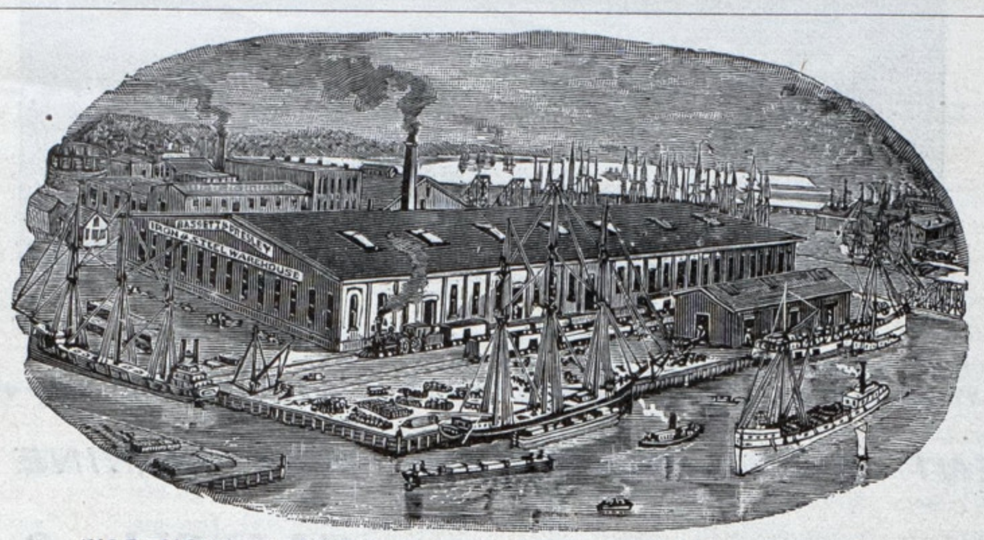

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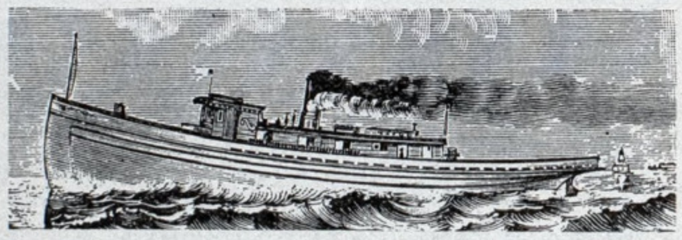

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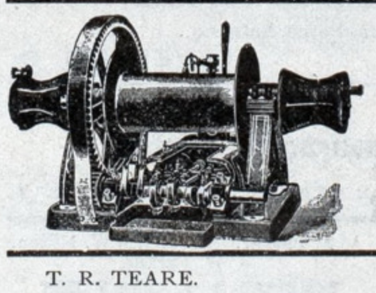

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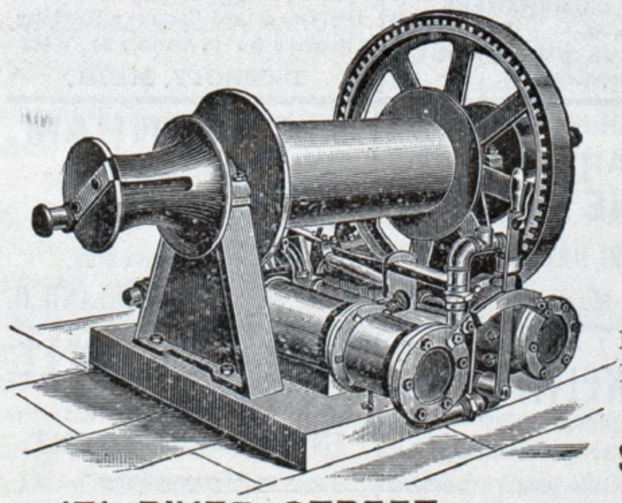

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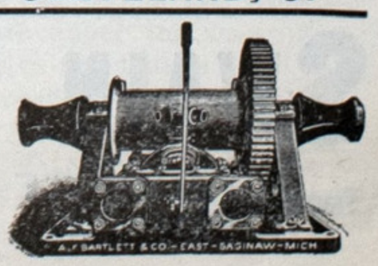

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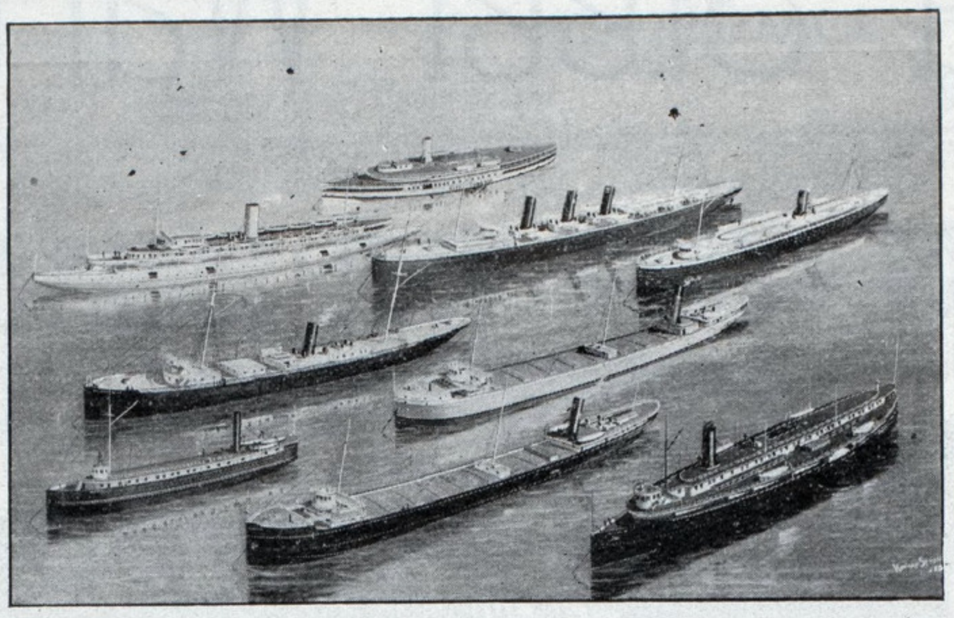

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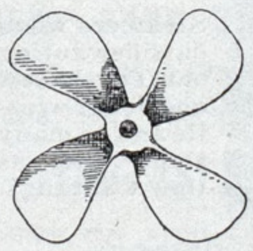

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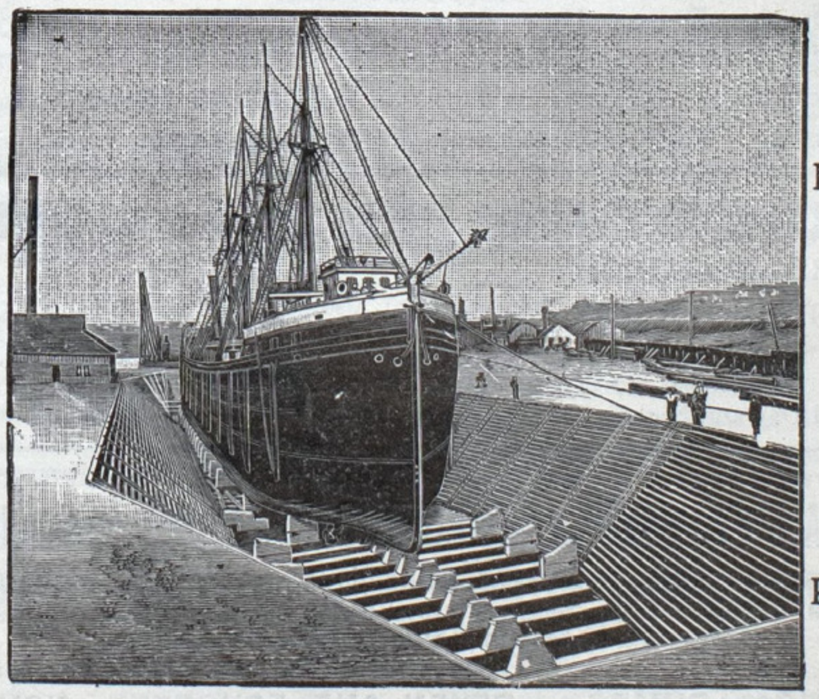

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